

Safety data sheet
according to UK REACH

Page 1/10

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Version number 2.06 (replaces version 2.05)

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

- **1.1 Product identifier**
- **Trade name:** Thioglycolic acid - Solution 80 %
- **Article number:** 2041
- **Application of the substance / the mixture**
Chemical analytics
Laboratory chemicals
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
PANREAC QUIMICA S.L.U.
C/Garraf 2
Polígono Pla de la Bruguera
E-08211 Castellar del Vallès (Barcelona)
Tel. (+34) 937 489 400
Fax. (+34) 937 489 401
e-mail: product.safety@itwreagents.com
- **Further information obtainable from:** email: product.safety@panreac.com
- **1.4 Emergency telephone number:**
Single telephone number for emergency calls: 112 (EU)
Tel.: (+34) 937 489 499

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
Acute Tox. 3 H301 Toxic if swallowed.
Acute Tox. 3 H311 Toxic in contact with skin.
Acute Tox. 3 H331 Toxic if inhaled.
Skin Corr. 1B H314 Causes severe skin burns and eye damage.
Eye Dam. 1 H318 Causes serious eye damage.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the GB CLP regulation.

(Contd. on page 2)

Trade name: Thioglycolic acid - Solution 80 %

(Contd. of page 1)

· **Hazard pictograms**



GHS05 GHS06

· **Signal word** Danger

· **Hazard-determining components of labelling:**

thioglycolic acid

· **Hazard statements**

H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled.

H314 Causes severe skin burns and eye damage.

· **Precautionary statements**

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P321 Specific treatment (see on this label).

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P361+P364 Take off immediately all contaminated clothing and wash it before reuse.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 68-11-1	thioglycolic acid	>50-<100%
EINECS: 200-677-4	Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; Skin Corr. 1B, H314; Eye Dam. 1, H318	

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· **General information:**

Immediately remove any clothing soiled by the product.

Remove breathing equipment only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

Involve doctor immediately.

· **After inhalation:**

Supply fresh air or oxygen; call for doctor.

(Contd. on page 3)

Trade name: Thioglycolic acid - Solution 80 %

(Contd. of page 2)

In case of unconsciousness place patient stably in side position for transportation.

If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

· **After skin contact:**

Call a doctor immediately.

Immediately wash with water and soap and rinse thoroughly.

Immediately remove any clothing soiled by the product.

· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

· **After swallowing:** Do not induce vomiting; call for medical help immediately.

· **4.2 Most important symptoms and effects, both acute and delayed**

No further relevant information available.

· **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**

· **Suitable extinguishing agents:**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **5.2 Special hazards arising from the substance or mixture**

In case of fire, the following can be released:

Carbon monoxide and carbon dioxide

Sulphur oxides (SO_x)

Non-combustible.

· **5.3 Advice for firefighters**

· **Protective equipment:**

Mouth respiratory protective device.

Wear self-contained respiratory protective device.

· **Additional information**

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

Contain escaping vapours with water.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Avoid substance contact.

Do not inhale steams/aerosols.

· **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

· **6.3 Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralising agent.

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

Clean up affected area.

· **6.4 Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

Trade name: Thioglycolic acid - Solution 80 %

(Contd. of page 3)

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:**
Keep respiratory protective device available.
The product is not flammable.
- **7.2 Conditions for safe storage, including any incompatibilities**
 - **Storage:**
 - **Requirements to be met by storerooms and receptacles:** Provide acid-resistant floor.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:**
Keep container tightly sealed.
Open receptacle only under localised extractor facilities.
Store receptacle in a well ventilated area.
Store under lock and key and with access restricted to technical experts or their assistants only.
 - **Recommended storage temperature:** Room Temperature
 - **Storage class:** 6.1 D
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· **Ingredients with limit values that require monitoring at the workplace:**

68-11-1 thioglycolic acid

WEL Long-term value: 3.8 mg/m³, 1 ppm

- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
 - **Appropriate engineering controls** No further data; see section 7.
 - **Individual protection measures, such as personal protective equipment**
 - **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Avoid contact with the eyes and skin.
 - **Respiratory protection:**
Filter ABEK
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
Use suitable respiratory protective device only when aerosol or mist is formed.
 - **Hand protection**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

(Contd. on page 5)

Trade name: Thioglycolic acid - Solution 80 %

(Contd. of page 4)

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **For the permanent contact gloves made of the following materials are suitable:**

Chloroprene rubber, CR

Recommended thickness of the material: ≥ 0.65 mm

Value for the permeation: Level ≥ 480 min min

· **As protection from splashes gloves made of the following materials are suitable:**

Natural rubber, NR

Recommended thickness of the material: ≥ 0.60 mm

Value for the permeation: Level ≥ 120 min min

· **Eye/face protection**



Gauze goggles

· **Body protection:**

Use protective suit.

Acid resistant protective clothing

Full head, face and neck protection

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Physical state**

Liquid

· **Colour:**

Colourless

· **Odour:**

Unpleasant

· **Odour threshold:**

Not determined.

· **Melting point/freezing point:**

Undetermined.

· **Boiling point or initial boiling point and boiling range**

Undetermined.

· **Flammability**

Not applicable.

· **Lower and upper explosion limit**

· **Lower:**

Not determined.

· **Upper:**

Not determined.

· **Flash point:**

Not applicable.

· **Decomposition temperature:**

Not determined.

· **pH at 20 °C**

~1

· **Viscosity:**

· **Kinematic viscosity**

Not determined.

· **Dynamic:**

Not determined.

· **Solubility**

· **water:**

Not determined.

· **Partition coefficient n-octanol/water (log value)**

Not determined.

· **Vapour pressure at 20 °C:**

0.1 hPa

(Contd. on page 6)

Trade name: Thioglycolic acid - Solution 80 %

(Contd. of page 5)

· Density and/or relative density	
· Density:	Not determined.
· Relative density	Not determined.
· Vapour density	Not determined.
· 9.2 Other information	
· Appearance:	
· Form:	Fluid
· Important information on protection of health and environment, and on safety.	
· Ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Solvent content:	
· Water:	20.0 %
· Change in condition	
· Evaporation rate	Not determined.
· Information with regard to physical hazard classes	
· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Void
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

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(Contd. on page 7)

Trade name: Thioglycolic acid - Solution 80 %

(Contd. of page 6)

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

· **Acute toxicity** Toxic if swallowed, in contact with skin or if inhaled.

· LD/LC50 values relevant for classification:

Quantitative data on the toxicological effect of this product are not available.

Components	Type	Value	Species
ATE (Acute Toxicity Estimates)			
Oral	LD50	91.3 mg/kg (rat)	
Dermal	LD50	375 mg/kg	
Inhalative	LC50/4 h	3.75 mg/l	

68-11-1 thioglycolic acid

Oral	LD50	73 mg/kg (rat)
Dermal	LD50	300 mg/kg (ATE)
Inhalative	LC50/4 h	3 mg/l (ATE)

· Primary irritant effect:

· **Skin corrosion/irritation** Causes severe skin burns and eye damage.

· **Serious eye damage/irritation** Causes serious eye damage.

· **After inhalation:** Strong caustic effect on skin and mucous membranes.

· Reproductive toxicity

68-11-1 thioglycolic acid

NOAEL (Fertility)	0.21 mg/kg bw/day (rat)
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11.2 Information on other hazards

· Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

12.1 Toxicity

· **Aquatic toxicity:** No further relevant information available.

· **12.2 Persistence and degradability** No further relevant information available.

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

12.5 Results of PBT and vPvB assessment

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

12.7 Other adverse effects

· Additional ecological information:

· General notes:

Do not allow product to reach ground water, water course or sewage system.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Danger to drinking water if even extremely small quantities leak into the ground.

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably

(Contd. on page 8)

Trade name: Thioglycolic acid - Solution 80 %



(Contd. of page 7)

increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Chemicals must be disposed of in compliance with the respective national regulations.
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:**
Disposal must be made according to official regulations.
Packagings that may not be cleansed are to be disposed of in the same manner as the product.

SECTION 14: Transport information

- | | |
|---|--------------------------------|
| · 14.1 UN number or ID number | |
| · ADR, IMDG, IATA | UN1940 |
| · 14.2 UN proper shipping name | |
| · ADR, IMDG, IATA | THIOGLYCOLIC ACID solution |
| · 14.3 Transport hazard class(es) | |
| · ADR | |
|  | |
| · Class | 8 (C3) Corrosive substances. |
| · Label | 8 |
| · IMDG, IATA | |
|  | |
| · Class | 8 Corrosive substances. |
| · Label | 8 |
| · 14.4 Packing group | |
| · ADR, IMDG, IATA | II |
| · 14.5 Environmental hazards: | Not applicable. |
| · 14.6 Special precautions for user | Warning: Corrosive substances. |
| · Hazard identification number (Kemler code): | 80 |
| · EMS Number: | F-A,S-B |
| · Segregation groups | (SGG1) Acids |
| · Stowage Category | A |
| · 14.7 Maritime transport in bulk according to IMO instruments | Not applicable. |

(Contd. on page 9)

Trade name: Thioglycolic acid - Solution 80 %

(Contd. of page 8)

· **Transport/Additional information:**

· **ADR**

· **Limited quantities (LQ)**

1L

· **Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· **Transport category**

2

· **Tunnel restriction code**

E

· **IMDG**

· **Limited quantities (LQ)**

1L

· **Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· **UN "Model Regulation":**

UN 1940 THIOGLYCOLIC ACID SOLUTION, 8, II

SECTION 15: Regulatory information

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

· **Poisons Act**

· **Regulated explosives precursors**

None of the ingredients is listed.

· **Regulated poisons**

None of the ingredients is listed.

· **Reportable explosives precursors**

None of the ingredients is listed.

· **Reportable poisons**

None of the ingredients is listed.

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **Seveso category** H2 ACUTE TOXIC

· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 50 t

· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H331 Toxic if inhaled.

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

(Contd. on page 10)

Trade name: Thioglycolic acid - Solution 80 %

(Contd. of page 9)

ICAO: International Civil Aviation Organisation

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

ATE: Acute toxicity estimate values

Acute Tox. 3: Acute toxicity – Category 3

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

· *** Data compared to the previous version altered.**

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