# 1 Identification of the substance/mixture and of the company/undertaking

**1.1 Product identifier**
Trade Name: TGO (IFCC) Reagent R1
Article n°: 2040XXX
MS: 80115310047

**1.2 Relevant identified uses of the substance or mixture and uses advised against**
General use: Reagent for in-vitro diagnostics in human samples
For professional use only.

**1.3 Details of the supplier of the safety data sheet**
Kovalent do Brasil Ltda.
Rua Cristóvão Sardinha, 110 – Jd. Bom Retiro – São Gonçalo – RJ – Brasil.
Tel: +(55 21) 2623-1367
e-mail: kovalent@kovalent.com.br

**1.4 Emergency telephone number**
Tel: +(55 21) 2623-1367 – Costumer service 8AM to 5PM.
0800 015 1414

**In case of emergency**
24 hours service
0800-722-6001 – RENACIAT (Rede Nacional de Centros de Informação e Assistência Toxicológica)

# 2 Hazards Identification

**2.1 Classification of the substance or mixture**
Classification according to ABNT NBR 14725.
This mixture is classified as not hazardous.

**2.2 Label elements**

**Labelling (GHS)**

Hazard statements: Not applicable

Precautionary statements: Not applicable

**Special labelling**

EUH210: Safety data sheet available on request.

**2.3 Other hazards**
No risks worthy of mention.

Endocrine disrupting properties, Results of PBT and vPvB assessment:
No data available

# 3 Composition/information on ingredients

**3.1 Substances**
Not applicable

**3.2 Mixtures**
Chemical characterization: Aqueous solution

Hazardous ingredients:

| Identifiers | Designation Classification | Content |
|---|---|---|
| EC No.<br>200-291-6<br>CAS 56-84-8 | Aspartic acid<br>Eye Irrit. 2; H319. | < 5% |

Full text of H- and EUH-statements: see section 16.

Additional information: Contains Sodium azide (0.95 g/L) as preservative.

## 4 First aid measures

### 4.1 Description of first aid measures

In case of inhalation: Provide fresh air. If the casualty has difficulty breathing, call a doctor immediately.

Following skin contact: Change contaminated clothing. Remove residues with water. In case of skin reactions, consult a physician.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rising. In case of troubles or persistent symptoms, consult an ophthalmologist.

After swallowing: Rinse mouth thoroughly with water. Do not induce vomiting without medical advice.
Have victim drink large quantities of water, with active charcoal if possible. Seek medical attention.
Never give anything by mouth to an unconscious person.

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

After eye contact: May cause irritations.

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

Treat symptomatically.

## 5 Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media: Product is non-combustible. Extinguishing materials should therefore be selected according to surroundings.

### 5.2 Special hazards arising from the substance or mixture

In case of fire may be liberated: : Nitrogen oxides (NOx), carbon monoxide and carbon dioxide.

### 5.3 Advice for firefighters

Special protective equipment for firefighters: Wear self-contained breathing apparatus.

Additional information: Do not allow fire water to penetrate into surface or ground water.

## 6 Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes. Wear appropriate protective equipment. Provide adequate ventilation.

### 6.2 Environmental precautions

Do not allow to penetrate into soil, waterbodies or drains.

### 6.3 Methods and material for containment and cleaning up

Soak up with absorbent materials such as sand, siliceous earth, acid- or universal binder.
Store in special closed containers and dispose of according to ordinance. Wash spill area with plenty of water.

### 6.4 Reference to other sections

Refer additionally to section 8 and 13.

## 7 Handling and storage

### 7.1 Precautions for safe handling

Advices on safe handling: Avoid contact with skin and eyes. Wear appropriate protective equipment. Keep all containers, equipment and working place clean.
Provide adequate ventilation, and local exhaust as needed. Wash hands before breaks and after work. Do not eat, drink or smoke when using this product.

### 7.2 Conditions for safe storage, including any incompatibilities

| | |
|---|---|
| Requirements for storerooms and containers: | Keep containers tightly closed and at a temperature between 2 °C and 8 °C. Protect from light. Do not freeze. Keep sterile. |
| Hints on joint storage: | Do not store together with: Acids, alkalis. |
| Storage class: | 12 = Non-combustible liquids |

**7.3 Specific end use(s)**
No information available.

## 8 Exposure controls/personal protection

**8.1 Control parameters**
Additional information: Contains no substances with occupational exposure limit values.

**8.2 Exposure controls**
Provide adequate ventilation, and local exhaust as needed.

**Personal protection equipment**
**Occupational exposure controls**

| | |
|---|---|
| Respiratory protection: | Provide adequate ventilation. |
| Hand protection: | Protective gloves according to EN 374.<br>Glove material: Nitrile rubber - Breakthrough time: >480 min.<br>Observe glove manufacturer's instructions concerning penetrability and breakthrough time. |
| Eye protection: | Tightly sealed goggles according to EN 166. |
| Body protection: | Wear suitable protective clothing. |

General protection and hygiene measures:
Avoid contact with skin and eyes. Change contaminated clothing. Wash hands before breaks and after work. When using do not eat, drink or smoke.

**Environmental exposure controls**
Refer to "6.2 Environmental precautions"

## 9 Physical and chemical properties

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

| | |
|---|---|
| Physical state at 20 °C and 101.3 kPa | Liquid |
| Colour: | Colourless, clear |
| Odour: | no characteristic odour |
| Odour threshold: | No data available |
| Melting point/freezing point: | No data available |
| Initial boiling point and boiling range: | No data available |
| Flammability: | No data available |
| Upper/lower flammability or explosive limits: | No data available |
| Flash point/flash point range: | Not combustible |
| Decomposition temperature: | No data available |
| pH: | at 37 °C: 7.65 |
| Viscosity, kinematic: | No data available |

| | |
|---|---|
| Water solubility: | Completely miscible |
| Partition coefficient: n-octanol/water: | No data available |
| Vapour pressure: | No data available |
| Density: | at 20 °C: 1.031 g/mL |
| Vapour density: | No data available |
| Particle characteristics: | Not applicable |

**9.2 Other information**

| | |
|---|---|
| Explosive properties: | No data available |
| Oxidizing characteristics: | No data available |
| Auto-ignition temperature: | No data available |
| Evaporation rate: | No data available |
| Additional information: | No data available |

## 10 Stability and reactivity

**10.1 Reactivity**
Refer to 10.3

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No hazardous reaction known.

**10.4 Conditions to avoid**
Protect against heat /sun rays.

**10.5 Incompatible materials**
Acids, alkalis.

**10.6 Hazardous decomposition products**
No hazardous decomposition products when regulations for storage and handling are observed.

| | |
|---|---|
| Thermal decomposition: | No data available |

## 11 Toxicological information

| | |
|---|---|
| Acute toxicity (oral): | Lack of data. |
| Acute toxicity (dermal): | Lack of data. |
| Acute toxicity (inhalative): | Lack of data. |
| Skin corrosion/irritation: | Lack of data. |
| Serious eye damage/irritation: | Based on available data, the classification criteria are not met. |
| Sensitisation to the respiratory tract: | Lack of data. |
| Skin sensitisation: | Lack of data. |
| Germ cell mutagenicity/Genotoxicity: | Lack of data. |
| Carcinogenicity: | Lack of data. |
| Reproductive toxicity: | Lack of data. |
| Effects on or via lactation: | Lack of data. |
| Specific target organ toxicity: (single exposure) | Lack of data. |
| Specific target organ toxicity: (repeated exposure) | Lack of data. |

| | |
|---|---|
| Aspiration hazard: | Lack of data. |
| Endocrine disrupting properties: | No data available |
| Other information: | Contains Sodium azide (0.95 g/L):<br>After resorption: headache, dizziness, nausea, cough, vomiting, spasms, breathing paralysis, CNS disorders, low blood pressure, cardiovascular failure, unconsciousness, collapse. |

**Symptoms**

| | |
|---|---|
| After eye contact: | May cause irritations. |

## 12 Ecological information

**12.1 Toxicity**
Water Hazard Class: 1 = slightly hazardous to water

**12.2 Persistence and degradability**
Further details: No data available

**12.3 Bioaccumulative potential**
Partition coefficient: n-octanol/water: No data available

**12.4 Mobility in soil**
No data available

**12.5 Results of PBT and vPvB assessment**
No data available

**12.6 Endocrine disrupting properties**
No data available

**12.7 Other adverse effects**
General information: Do not allow to enter into ground-water, surface water or drains.

## 13 Disposal considerations

**13.1 Waste treatment methods**

| | |
|---|---|
| Product: | Dispose of waste according to applicable legislation. |
| Package: | Dispose of waste according to applicable legislation. |
| Additional information: | Do not reuse empty containers. |

## 14 Transport information

**14.1 UN number or ID number**
ADR/RID, ADN, IMDG, IATA-DGR Not applicable

**14.2 UN proper shipping name**
ADR/RID, ADN, IMDG, IATA-DGR Not restricted

**14.3 Transport hazard class(es)**
ADR/RID, ADN, IMDG, IATA-DGR Not applicable

**14.4 Risk Number**
-

**14.5 Packing group**

| | |
|---|---|
| ADR/RID, ADN, IMDG, IATA-DGR | Not applicable |

**14.5 Environmental hazards**

| | |
|---|---|
| Dangerous for the environment: | Substance/mixture is not environmentally hazardous according to the criteria of the UN model regulations. |
| Marine pollutant - IMDG: | No |

**14.6 Special precautions for user**

No dangerous good in sense of these transport regulations.

## 15 Regulatory information

• Product produced in accordance with the requirements established by RDC 665 of 30/03/2022 and with labeling information in accordance with RDC 206 of 17/11/2006.

• For more details on product disposal refer to RDC 222 of 28/03/2018 and NBR 10004.

• This safety data sheet was prepared in accordance with ABNT/NBR 14725:23.

## 16 Other information

Wording of the H-phrases under paragraph 2 and 3:
H319 = Causes serious eye irritation.
EUH210 = Safety data sheet available on request

The above information is considered correct but is not intended to be complete and should be used only as a guide. Kovalent is not responsible for any damage resulting from handling or use.

In article XXX: The three X are for the volume.

**Abbreviations and acronyms:**
ABNT: Associação Brasileira de Normas Técnicas
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
AS/NZS: Australian Standards/New Zealand Standards
CAS: Chemical Abstracts Service
CE: Conformite Europeenne
CFR: Code of Federal Regulations
CLP: Classification, Labelling and Packaging
CNS: Central Nervous System
DMEL: Derived minimal effect level
DNEL: Derived no-effect level
EC: European Community
EN: European Standard
EQ: Excepted quantities
EU: European Union
Eye Irrit.: Eye irritation
GHS: Globally Harmonized System
IATA: International Air Transport Association
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IMDG Code: International Maritime Dangerous Goods Code
MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
MS: Ministério da Saúde
NBR: Norma Brasileira
OSHA: Occupational Safety and Health Administration
PBT: Persistent, bioaccumulative and toxic
PNEC: Predicted no-effect concentration
RDC: Resolução da Diretoria Colegiada
RENACIAT: Rede Nacional de Centros de Informação e Assistência Toxicológica
RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
TRGS: Technical Rules for Hazardous Substances
vPvB: Very persistent and very bioaccumulative

## 1 Identification of the substance/mixture and of the company/undertaking

**1.1 Product identifier**
Trade Name: TGO (IFCC) Reagent R2
Article n°: 2040XXX
MS: 80115310047

**1.2 Relevant identified uses of the substance or mixture and uses advised against**
General use: Reagent for in-vitro diagnostics in human samples
For professional use only.

**1.3 Details of the supplier of the safety data sheet**
Kovalent do Brasil Ltda.
Rua Cristóvão Sardinha, 110 – Jd. Bom Retiro – São Gonçalo – RJ – Brasil.
Tel: +(55 21) 2623-1367
e-mail: kovalent@kovalent.com.br

**1.4 Emergency telephone number**
Tel: +(55 21) 2623-1367 – Costumer service 8AM to 5PM.
0800 015 1414

**In case of emergency**
24 hours service
0800-722-6001 – RENACIAT (Rede Nacional de Centros de Informação e Assistência Toxicológica)

## 2 Hazards Identification

**2.1 Classification of the substance or mixture**
Classification according to ABNT NBR 14725.
This mixture is classified as not hazardous.

**2.2 Label elements**

Labelling (GHS)

Hazard statements: Not applicable

Precautionary statements: Not applicable

**2.3 Other hazards**
No risks worthy of mention.

Endocrine disrupting properties, Results of PBT and vPvB assessment:
No data available

## 3 Composition/information on ingredients

**3.1 Substances**
Not applicable

**3.2 Mixtures**
Chemical characterization: Aqueous solution

Additional information: The product does not contain dangerous substances above limits that need to be mentioned in this section according to applicable legislation.

Contains Sodium azide (0.95 g/L) as preservative.

## 4 First aid measures

**4.1 Description of first aid measures**
In case of inhalation: Provide fresh air. If the casualty has difficulty breathing, call a doctor immediately.

| | |
|---|---|
| Following skin contact: | Change contaminated clothing. Remove residues with water. In case of skin reactions, consult a physician. |
| After eye contact: | Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Subsequently consult an ophthalmologist. |
| After swallowing: | Rinse mouth thoroughly with water. Do not induce vomiting without medical advice. Have victim drink large quantities of water, with active charcoal if possible. Seek medical attention. |

**4.2 Most important symptoms and effects, both acute and delayed**
After eye contact: mild irritant.

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

## 5 Firefighting measures

**5.1 Extinguishing media**

| | |
|---|---|
| Suitable extinguishing media: | Product is non-combustible. Extinguishing materials should therefore be selected according to surroundings. |

**5.2 Special hazards arising from the substance or mixture**
Fires in the immediate vicinity may cause the development of dangerous vapours.

| | |
|---|---|
| n case of fire may be liberated: | Sodium compounds, carbon monoxide and carbon dioxide. |

**5.3 Advice for firefighters**

| | |
|---|---|
| Special protective equipment for firefighters: | Wear self-contained breathing apparatus. |
| Additional information: | Do not allow fire water to penetrate into surface or ground water. |

## 6 Accidental release measures

**6.1 Personal precautions, protective equipment and emergency procedures**
Avoid contact with skin and eyes. Do not breathe vapors. In enclosed areas: Provide fresh air. Wear appropriate protective equipment.

**6.2 Environmental precautions**
Do not allow to penetrate into soil, waterbodies or drains.

**6.3 Methods and material for containment and cleaning up**
Soak up with absorbent materials such as sand, siliceous earth, acid- or universal binder.
Store in special closed containers and dispose of according to ordinance. Wash spill area with plenty of water.

**6.4 Reference to other sections**
Refer additionally to section 8 and 13.

## 7 Handling and storage

**7.1 Precautions for safe handling**

| | |
|---|---|
| Advices on safe handling: | Avoid contact with skin and eyes. Keep all containers, equipment and working place clean. Wear appropriate protective equipment.<br>Provide adequate ventilation, and local exhaust as needed. Wash hands before breaks and after work. Do not eat, drink or smoke when using this product. |

**7.2 Conditions for safe storage, including any incompatibilities**

| | |
|---|---|
| Requirements for storerooms and containers: | Keep containers tightly closed and at a temperature between 2 °C and 8 °C. Protect from light. Do not freeze. Keep sterile. |
| Hints on joint storage: | Do not store together with: Acids, alkalis. |

Storage class: 12 = Non-combustible liquids

**7.3 Specific end use(s)**
No information available.

## 8 Exposure controls/personal protection

**8.1 Control parameters**
Additional information: Contains no substances with occupational exposure limit values.

**8.2 Exposure controls**
Provide good ventilation and/or an exhaust system in the work area.

**Personal protection equipment**
**Occupational exposure controls**
Respiratory protection: If vapours form, use respiratory protection. Use filter type A (= against vapours of organic substances) according to EN 14387.

Hand protection: Protective gloves according to EN 374.
Glove material: Nitrile rubber - Breakthrough time: >480 min.
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection: Tightly sealed goggles according to EN 166.

Body protection: Wear suitable protective clothing.

General protection and hygiene measures:
Avoid contact with skin and eyes. Change contaminated clothing.
Wash hands before breaks and after work. When using do not eat, drink or smoke.

**Environmental exposure controls**
Refer to "6.2 Environmental precautions"

## 9 Physical and chemical properties

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

| | |
|---|---|
| Physical state at 20 °C and 101.3 kPa | Liquid |
| Colour: | Clear, slightly yellowish |
| Odour: | No characteristic odour |
| Odour threshold: | No data available |
| Melting point/freezing point: | No data available |
| Initial boiling point and boiling range: | No data available |
| Flammability: | No data available |
| Upper/lower flammability or explosive limits: | No data available |
| Flash point/flash point range: | Not combustible |
| Decomposition temperature: | No data available |
| pH: | at 25 °C: 9.6 – 9.7 |
| Viscosity, kinematic: | No data available |
| Water solubility: | Completely miscible |

| | |
|---|---|
| Partition coefficient: n-octanol/water: | No data available |
| Vapour pressure: | No data available |
| Density: | at 20 °C: 1.015 g/mL |
| Vapour density: | No data available |
| Particle characteristics: | Not applicable |

**9.2 Other information**

| | |
|---|---|
| Explosive properties: | No data available |
| Oxidizing characteristics: | No data available |
| Auto-ignition temperature: | No data available |
| Evaporation rate: | No data available |
| Additional information: | No data available |

## 10 Stability and reactivity

**10.1 Reactivity**
Refer to 10.3

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No hazardous reactions known.

**10.4 Conditions to avoid**
Protect against heat /sun rays.

**10.5 Incompatible materials**
Acids, alkalis.

**10.6 Hazardous decomposition products**
No hazardous decomposition products when regulations for storage and handling are observed.

| | |
|---|---|
| Thermal decomposition: | No data available |

## 11 Toxicological information

| | |
|---|---|
| Acute toxicity (oral): | Lack of data. |
| Acute toxicity (dermal): | Lack of data. |
| Acute toxicity (inhalative): | Lack of data. |
| Skin corrosion/irritation: | Lack of data. |
| Serious eye damage/irritation: | Lack of data. |
| Sensitisation to the respiratory tract: | Lack of data. |
| Skin sensitisation: | Lack of data. |
| Germ cell mutagenicity/Genotoxicity: | Lack of data. |
| Carcinogenicity: | Lack of data. |
| Reproductive toxicity: | Lack of data. |
| Effects on or via lactation: | Lack of data. |
| Specific target organ toxicity: (single exposure) | Lack of data. |
| Specific target organ toxicity: (repeated exposure) | Lack of data. |
| Aspiration hazard: | Lack of data. |

| | |
|---|---|
| Endocrine disrupting properties: | No data available |
| Other information: | Contains Sodium azide (0.95 g/L):<br>After resorption: headache, dizziness, nausea, cough, vomiting, spasms, breathing paralysis, CNS disorders, low blood pressure, cardiovascular failure, unconsciousness, collapse. |

**Symptoms**

| | |
|---|---|
| After eye contact: | Mild irritant. |

## 12 Ecological information

**12.1 Toxicity**
Water Hazard Class: 1 = slightly hazardous to water

**12.2 Persistence and degradability**
Further details: No data available

**12.3 Bioaccumulative potential**
Partition coefficient: n-octanol/water: No data available

**12.4 Mobility in soil**
No data available

**12.5 Results of PBT and vPvB assessment**
No data available

**12.6 Endocrine disrupting properties**
No data available

**12.7 Other adverse effects**
General information: Do not allow to enter into ground-water, surface water or drains.

## 13 Disposal considerations

**13.1 Waste treatment methods**

| | |
|---|---|
| Product: | Dispose of waste according to applicable legislation. |
| Package: | Dispose of waste according to applicable legislation. |
| Additional information: | Do not reuse empty containers. |

## 14 Transport information

**14.1 UN number or ID number**
ADR/RID, ADN, IMDG, IATA-DGR Not applicable

**14.2 UN proper shipping name**
ADR/RID, ADN, IMDG, IATA-DGR Not restricted

**14.3 Transport hazard class(es)**
ADR/RID, ADN, IMDG, IATA-DGR Not applicable

**14.4 Risk Number**
-

**14.5 Packing group**
ADR/RID, ADN, IMDG, IATA-DGR Not applicable

**14.5 Environmental hazards**

| | |
|---|---|
| Dangerous for the environment: | Substance/mixture is not environmentally hazardous according to the criteria of the UN model regulations. |
| Marine pollutant - IMDG: | No |

**14.6 Special precautions for user**

No dangerous good in sense of these transport regulations.

## 15 Regulatory information

• Product produced in accordance with the requirements established by RDC 665 of 30/03/2022 and with labeling information in accordance with RDC 206 of 17/11/2006.

• For more details on product disposal refer to RDC 222 of 28/03/2018 and NBR 10004.

• This safety data sheet was prepared in accordance with ABNT/NBR 14725:23.

## 16 Other information

The above information is considered correct but is not intended to be complete and should be used only as a guide. Kovalent is not responsible for any damage resulting from handling or use.

In article XXX: The three X are for the volume.

**Abbreviations and acronyms:**

ABNT: Associação Brasileira de Normas Técnicas
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
AS/NZS: Australian Standards/New Zealand Standards
CAS: Chemical Abstracts Service
CE: Conformite Europeenne
CFR: Code of Federal Regulations
CLP: Classification, Labelling and Packaging
CNS: Central Nervous System
DMEL: Derived minimal effect level
DNEL: Derived no-effect level
EC: European Community
EN: European Standard
EQ: Excepted quantities
EU: European Union
GHS: Globally Harmonized System
IATA: International Air Transport Association
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IMDG Code: International Maritime Dangerous Goods Code
MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
MS: Ministério da Saúde
NBR: Norma Brasileira
OSHA: Occupational Safety and Health Administration
PBT: Persistent, bioaccumulative and toxic
PNEC: Predicted no-effect concentration
RDC: Resolução da Diretoria Colegiada
RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
TRGS: Technical Rules for Hazardous Substances
vPvB: Very persistent and very bioaccumulative