



SAFETY DATA SHEET

Revision n°

000

Revision Date

07.09.2015 Pag. no. 1/5 DOC MSDS_TECHNO GEL GUM PARTE A

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.

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

1.1 Product identifier:

Product name: TEGELGUM PARTE A Synonyms, Trade Names: **TECHNO GEL GUM**

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

Identified uses: Isolation of electrical or electronic material.

Uses advised against: None known.

1.3 Details of the supplier of the safety data sheet:

Manufacturer: RAYTECH S.r.l.

Via Enrico Fermi 11, 13, 17

20019 Settimo Milanese (MI) - ITALIA

Telephone: +39 (02) 33500147 Fax: +39 (02) 33500287 e-mail: info@raytech.it Supplier: RAYTECH S.r.l.

> Via Enrico Fermi 11, 13, 17 I-20019 Settimo Milanese (MI) tel +39 (02) 33500147

fax: +39 (02) 33500287

1.4 Emergency telephone number: +39 (02) 33500147

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

The product has not been classified as hazardous according to the legislation in force.

Hazard summary:

Physical Hazards: No specific recommendations.

Health Hazards:

Inhalation: No specific symptoms noted. Eye contact: No specific symptoms noted. **Skin Contact:** No specific symptoms noted. Ingestion: No specific symptoms noted. Other Health Effects: No other information noted.

Environmental hazards: Not regarded as dangerous for the environment.

2.2 Label Elements: The product does not need to be labeled in accordance with EC directives

or respective national laws.

2.3 Other hazards: No data available.

SECTION 3: Composition/information on ingredients

3.2 Mixtures:

General information: Mixture of Polyorganosiloxanes, fillers, additives.

SECTION 4: First aid measures

General: Get medical attention if symptoms occur. Contaminated clothing to be

placed in closed container until disposal or decontamination.

4.1 Description of first aid measures:

Inhalation: Not relevant.

In the event of contact with the eyes, rinse thoroughly with clean water. Eye contact:

Continue to rinse for at least 15 minutes.

Skin Contact: Remove contaminated clothing and shoes. Wash with soap and water.

Ingestion: Do not induce vomiting. Rinse mouth thoroughly. Revision n° 000 Revision Date 07.09.2015 Pag. no. 2/5 DOC MSDS_TECHNO GEL GUM PARTE A

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

None known.

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

Hazards: No specific recommendations. **Treatment:** No specific recommendations.

SECTION 5: Firefighting measures

General Fire Hazards: No specific recommendations.

5.1 Extinguishing media:

Suitable extinguishing media: Extinguish with foam, carbon dioxide or dry powder. Water spray.

Unsuitable extinguishing media: None known

5.2 Special hazards arising from theCombustible. For further information, refer to Section 10: "Stability and

substance or mixture: Reactivity".

5.3 Advice for firefighters:

Special fire fighting procedures: Water spray should be used to cool containers.

Special protective equipment for Self-contained breathing apparatus and full protective clothing must be

fire-fighters: worn in case of fire.

SECTION 6: Accidental release measures

6.1 Personal precautions, protectiveUse personal protective equipment. See Section 8 of the MSDS for

equipment and emergency procedures: Personal Protective Equipment.

6.2 Environmental Precautions: Collect spillage. Do not discharge into drains, water courses or onto the

ground

6.3 Methods and material for containment Containers with collected spillage must be properly labelled with correct

and cleaning up:

containers with conected spinage must be properly labelled with conected contents and hazard symbol. Container must be kept tightly closed. Absorb with sand or other inert absorbent. To clean the floor and all objects contaminated by this material, use an appropriate solvent.(cf. : § 9) Flush area with plenty of water. Incinerate in suitable combustion chamber.

Notification Procedures: Caution: Contaminated surfaces may be slippery. For waste disposal, see

section 13 of the MSDS.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling: No specific precautions.

7.2 Conditions for safe storage, including

any incompatibilities:

No special storage precautions noted. Material is stable under normal conditions. Avoid contact with oxidizing agents. Suitable containers:

polyethylene. Plastic lined steel drum.

7.3 Specific end use(s): No specific recommendations.

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters:

Occupational Exposure Limits:

None of the components have assigned exposure limits.

8.2 Exposure controls:

Appropriate engineering controls: No special precautions.

Individual protection measures, such as personal protective equipment

General information: No specific precautions.

Eye/face protection: Safety Glasses

Skin protection:

Hand Protection: Use protective gloves made of: Nitrile. Polyvinyl chloride (PVC). Rubber or

olastic.

Other: No skin protection is ordinarily required under normal conditions of use. In

accordance with good industrial hygiene practices, precautions should be

taken to avoid skin contact.

Respiratory Protection: No specific precautions.

Hygiene measures: Provide eyewash station and safety shower.

Environmental Controls: No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance:

Physical State: Liquid

RAYTECH S.r.I.

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Form: Viscous Liquid

Color: White
Odor: Odorless

Odor Threshold:

pH:

Not applicable

Freezing point:

No data available.

No data available.

No data available.

Flash Point: > 180 °C (Closed cup according to method ASTM D-56.)

Evaporation Rate:

Flammability (solid, gas):

Flammability Limit - Upper (%)-:

Flammability Limit - Lower (%)-:

No data available.

Flammability Limit - Lower (%)-:

No data available.

Vapor pressure:

< 0,1 hPa (20 °C)

Vapor density (air=1):

Relative density:

1,05 Approximate

Solubility(ies):

Solubility in Water: Practically Insoluble

Solubility (other):

Diethylether.: Miscible (in all proportions).
Chlorinated solvents.: Miscible (in all proportions).
Aromatic hydrocarbons.: Miscible (in all proportions).
Aliphatic hydrocarbons.: Miscible (in all proportions).
Acetone.: Very slightly soluble.
Ethanol.: Very slightly soluble.

Partition coefficient (n-octanol/water):No data available. **Autoignition Temperature:**No data available.

Decomposition Temperature: > 200 °C

Viscosity: 3 000 mm2/s (20 °C) Explosive properties: No data available.

Oxidizing properties: According to the data on the components Not considered as oxidizing.

(evaluation by structure-activity relationship)

SECTION 10: Stability and reactivity

10.1 Reactivity:Not relevant.10.2 Chemical Stability:Stable10.3 Possibility of Hazardous Reactions:Not known.

10.4 Conditions to Avoid:No other information noted. **10.5 Incompatible Materials:**Strong oxidizing agents.

10.6 Hazardous Decomposition Products: Thermal decomposition or combustion may liberate carbon oxides and

other toxic gases or vapors. Amorphous silica.

SECTION 11: Toxicological information

Information on likely routes of exposure

Inhalation:No effects expected (assessment based on ingredients).Ingestion:No effects expected (assessment based on ingredients).Skin Contact:No effects expected (assessment based on ingredients).Eye contact:No effects expected (assessment based on ingredients).

11.1 Information on toxicological effects:

Tossicità acuta:

Oral:

Product: No effects expected (assessment based on ingredients).

Dermal:

Product: No effects expected (assessment based on ingredients).

Inhalation:

Product: No effects expected (assessment based on ingredients).

Repeated Dose Toxicity:

Product: No effects expected (assessment based on ingredients).

Skin Corrosion/Irritation:

Product: No effects expected (assessment based on ingredients).

Serious Eye Damage/Eye Irritation:

Product: No effects expected (assessment based on ingredients).

Respiratory or Skin Sensitization:

Product: No effects expected (assessment based on ingredients).

Germ Cell Mutagenicity:

In vitro:

Product: No effects expected (assessment based on ingredients).

In vivo:

Product: No effects expected (assessment based on ingredients).

Carcinogenicity:

Product: No effects expected (assessment based on ingredients).

Reproductive Toxicity:

Product: No effects expected (assessment based on ingredients).

Reproductive Toxicity (Fertility):

Product: No effects expected (assessment based on ingredients).

Developmental Toxicity (Teratogenicity):

Product: No effects expected (assessment based on ingredients).

Specific Target Organ Toxicity - Single Exposure:

Product: No effects expected (assessment based on ingredients).

Specific Target Organ Toxicity - Repeated Exposure:

Product: Aspiration Hazard: Product:

Other Adverse Effects: None known.

SECTION 12: Ecological information

12.1 Toxicity: Acute toxicity:

Fish:

Product: No effects expected (assessment based on ingredients).

Aquatic Invertebrates:

Product: No effects expected (assessment based on ingredients).

Chronic Toxicity:

Fish:

Product: No effects expected (assessment based on ingredients).

Aquatic Invertebrates:

Product: No effects expected (assessment based on ingredients).

Toxicity to Aquatic Plants:

Product: No effects expected (assessment based on ingredients).

12.2 Persistence and Degradability:

Biodegradation:

Product: Not applicable

BOD/COD Ratio:

Product: No data available.

12.3 Bioaccumulative Potential:

Product: No data available.

12.4 Mobility in Soil: No data available.

12.5 Results of PBT and vPvB assessment: None Reported

12.6 Other Adverse Effects: None known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods:

General information: The user's attention is drawn to the possible existence of local regulations

regarding disposal.

Disposal methods: Dispose of waste at an appropriate treatment and disposal facility in

accordance with applicable laws and regulations, and product characteristics at time of disposal. Incinerate in suitable combustion

chamber.

Contaminated packages should be as empty as possible. Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. Recycle following cleaning or dispose of at an authorised site.

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European Waste Codes: Data available upon request.

SECTION 14: Transport information

This material is not subject to transport regulations.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.

SECTION 15: Regulatory information

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

National Regulations:

15.2 Chemical safety assessment: No data available.

SECTION 16: Other information

Revision Information:Not relevant.Key abbreviations or acronyms used:No data available.Key literature references and sources forNo data available.

data:

Wording of the R-phrases and H- None

statements in section 2 and 3:

Training information: No data available.

Inventory Status

Australia AICS: On or in compliance with the inventory Canada DSL Inventory List: On or in compliance with the inventory **EU EINECS List:** On or in compliance with the inventory Not in compliance with the inventory. Japan (ENCS) List: IECSC: Not in compliance with the inventory. Korea Existing Chemicals Inv. (KECI): On or in compliance with the inventory Philippines PICCS: On or in compliance with the inventory US TSCA Inventory: On or in compliance with the inventory New Zealand Inventory of Chemicals: On or in compliance with the inventory

Disclaimer:

The information given is based on data available for the material, the components of the material, and similar materials. The information is believed to be correct. It is given in good faith. This information should be used to make an independent determination of the methods to safeguard workers and the environment.





SAFETY DATA SHEET

Revision n°

000

Revision Date

07.09.2015 Pag. no. 1/5 DOC MSDS_TECHNO GEL GUM PARTE B

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.

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

1.1 Product identifier:

Product name: TEGELGUM PARTE R Synonyms, Trade Names: TECHNO GEL GUM

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

Identified uses: Isolation of electrical or electronic material.

Uses advised against: None known.

1.3 Details of the supplier of the safety data sheet:

Manufacturer: RAYTECH S.r.l.

Via Enrico Fermi 11, 13, 17

20019 Settimo Milanese (MI) - ITALIA

Telephone: +39 (02) 33500147 Fax: +39 (02) 33500287 e-mail: info@raytech.it Supplier: RAYTECH S.r.l.

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fax: +39 (02) 33500287

1.4 Emergency telephone number: +39 (02) 33500147

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

The product has not been classified as hazardous according to the legislation in force.

Hazard summary:

Physical Hazards: No specific recommendations. This product may generate hydrogen gas.

For further information, refer to Section 10: "Stability and Reactivity".

Health Hazards:

Inhalation: No specific symptoms noted. Eye contact: No specific symptoms noted. **Skin Contact:** No specific symptoms noted. Ingestion: No specific symptoms noted. Other Health Effects: No other information noted.

Environmental hazards: Not regarded as dangerous for the environment.

2.2 Label Elements: The product does not need to be labeled in accordance with EC directives

or respective national laws.

2.3 Other hazards: Chemical compounds containing silicon - hydrogen bonds (SiH).

SECTION 3: Composition/information on ingredients

3.2 Mixtures:

General information: Mixture of Polyorganosiloxanes, fillers, additives.

SECTION 4: First aid measures

General: Get medical attention if symptoms occur. Contaminated clothing to be

placed in closed container until disposal or decontamination.

4.1 Description of first aid measures:

Inhalation: Not relevant.

Eye contact: In the event of contact with the eyes, rinse thoroughly with clean water.

Continue to rinse for at least 15 minutes.

Skin Contact: Remove contaminated clothing and shoes. Wash with soap and water. 000 07.09.2015 MSDS_TECHNO GEL GUM PARTE B **Revision Date**

Ingestion: Do not induce vomiting. Rinse mouth thoroughly.

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

None known.

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

Hazards: No specific recommendations. Treatment: No specific recommendations.

SECTION 5: Firefighting measures

General Fire Hazards: No specific recommendations.

5.1 Extinguishing media:

Suitable extinguishing media: Extinguish with foam, carbon dioxide or dry powder. Water spray.

Unsuitable extinguishing media: None known.

5.2 Special hazards arising from the substance or mixture:

Combustible. For further information, refer to Section 10: "Stability and

Reactivity".

5.3 Advice for firefighters:

Special fire fighting procedures: Water spray should be used to cool containers.

Special protective equipment for

fire-fighters:

Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: Wear appropriate personal protective equipment. See Section 8 of the MSDS for Personal Protective Equipment. Keep away from Alkalis and

caustic products. Eliminate all sources of ignition.

6.2 Environmental Precautions: Collect spillage. Do not discharge into drains, water courses or onto the

ground.

6.3 Methods and material for containment and cleaning up: Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Container must be kept tightly closed. Absorb with sand or other inert absorbent. To clean the floor and all objects contaminated by this material, use an appropriate solvent.(cf. : § 9) Flush area with plenty of water. Incinerate in suitable combustion chamber.

Notification Procedures: Caution: Contaminated surfaces may be slippery. For waste disposal, see

section 13 of the MSDS.

SECTION 7: Handling and storage:

Use mechanical ventilation in case of handling which causes formation of 7.1 Precautions for safe handling:

vapors. Do not mix with Incompatible materials. For further information,

refer to Section 10: "Stability and Reactivity". Read and follow

manufacturer's recommendations.

7.2 Conditions for safe storage, including

any incompatibilities:

Store in a cool, dry place with adequate ventilation. Keep away from incompatible materials, open flames, and high temperatures. Store in tightly closed original container. Suitable containers: polyethylene. Steel

drums coated with epoxy-resin.

7.3 Specific end use(s): No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters:

Occupational Exposure Limits:

None of the components have assigned exposure limits.

8.2 Exposure controls:

Appropriate engineering controls: No special precautions. Individual protection measures, such as personal protective equipment **General information:** No specific precautions.

Eye/face protection:

Skin protection:

Safety Glasses

Hand Protection:

Use protective gloves made of: Nitrile. Polyvinyl chloride (PVC). Rubber or

plastic.

Other: No skin protection is ordinarily required under normal conditions of use. In

accordance with good industrial hygiene practices, precautions should be

taken to avoid skin contact.

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Respiratory Protection: No specific precautions.

Hygiene measures: Provide eyewash station and safety shower.

Environmental Controls: No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance:

Physical State: Liquid

Form: Liquid Viscous

Color: Blue Odor! Odorless

Odor Threshold:

pH:

No data available.

Not applicable

Freezing point:

No data available.

No data available.

No data available.

Flash Point: > 180 °C (Closed cup according to method ASTM D-56.)

Evaporation Rate:

Flammability (solid, gas):

Flammability Limit - Upper (%)—:

Flammability Limit - Lower (%)—:

Vapor pressure:

Vapor density (air=1):

Relative density:

No data available.

No data available.

No data available.

1,05 (20 °C)

Solubility(ies):

Solubility in Water: Practically Insoluble

Solubility (other):

Diethylether.: Miscible (in all proportions).
Chlorinated solvents.: Miscible (in all proportions).
Aromatic hydrocarbons.: Miscible (in all proportions).
Aliphatic hydrocarbons.: Miscible (in all proportions).
Acetone.: Very slightly soluble.
Ethanol.: Very slightly soluble.

Partition coefficient (n-octanol/water):No data available.Autoignition Temperature:No data available.

Decomposition Temperature: > 200 °C

Viscosity:3000 mm2/s (20 °C)Explosive properties:5 000 mm2/s (20 °C)

Oxidizing properties: According to the data on the components Not considered as oxidizing.

(evaluation by structure-activity relationship)

SECTION 10: Stability and reactivity

10.1 Reactivity: No other information noted.

10.2 Chemical Stability: Material is stable under normal conditions.
 10.3 Possibility of Hazardous Reactions: This product may generate hydrogen gas.

10.4 Conditions to Avoid: No other information noted.

10.5 Incompatible Materials: A fire or explosion hazard arises because highly flammable gas (hydrogen)

is released when it is in contact with : Strong oxidizing agents. Alkalis and caustic products. Chemical compounds with mobile hydrogen, in the

presence of metal salts and complexes.

10.6 Hazardous Decomposition Products: Thermal decomposition or combustion may liberate carbon oxides and

other toxic gases or vapors. Amorphous silica.

Quantity of hydrogen potentially released (I/kg of product): <1

SECTION 11: Toxicological information

Information on likely routes of exposure

Inhalation:No effects expected (assessment based on ingredients).Ingestion:No effects expected (assessment based on ingredients).Skin Contact:No effects expected (assessment based on ingredients).Eye contact:No effects expected (assessment based on ingredients).

11.1 Information on toxicological effects:

Tossicità acuta:

Oral:

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Product: No effects expected (assessment based on ingredients).

Not classified for acute toxicity based on available data.

Dermal:

Product: No effects expected (assessment based on ingredients).

Not classified for acute toxicity based on available data.

Inhalation:

Product: No effects expected (assessment based on ingredients).

Repeated Dose Toxicity:

Product: No effects expected (assessment based on ingredients).

Skin Corrosion/Irritation:

Product: No effects expected (assessment based on ingredients).

Serious Eye Damage/Eye Irritation:

Product: No effects expected (assessment based on ingredients).

Respiratory or Skin Sensitization:

Product: No effects expected (assessment based on ingredients).

Germ Cell Mutagenicity:

In vitro:

Product: No effects expected (assessment based on ingredients).

In vivo:

Product: No effects expected (assessment based on ingredients).

Carcinogenicity:

Product: No effects expected (assessment based on ingredients).

Reproductive Toxicity:

Product: No effects expected (assessment based on ingredients).

Reproductive Toxicity (Fertility):

Product: No effects expected (assessment based on ingredients).

Developmental Toxicity (Teratogenicity):

Product: No effects expected (assessment based on ingredients).

Specific Target Organ Toxicity - Single Exposure:

Product: No effects expected (assessment based on ingredients).

Specific Target Organ Toxicity - Repeated Exposure:

Product: No effects expected (assessment based on ingredients).

Aspiration Hazard:

Product: No effects expected (assessment based on ingredients).

Other Adverse Effects: None known.

SECTION 12: Ecological information

12.1 Toxicity:

Acute toxicity:

Fish:

Product: No effects expected (assessment based on ingredients).

Aquatic Invertebrates:

Product: No effects expected (assessment based on ingredients).

Chronic Toxicity:

Fish:

Product: No effects expected (assessment based on ingredients).

Aquatic Invertebrates:

Product: No effects expected (assessment based on ingredients).

Toxicity to Aquatic Plants:

Product: No effects expected (assessment based on ingredients).

12.2 Persistence and Degradability:

Biodegradation:

Product: Not applicable

BOD/COD Ratio:

Product: No data available.

12.3 Bioaccumulative Potential:

Product: No data available.

12.4 Mobility in Soil: No data available.

12.5 Results of PBT and vPvB assessment: None Reported

12.6 Other Adverse Effects: None known.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods:

General information: The user's attention is drawn to the possible existence of local regulations

regarding disposal.

Disposal methods: Dispose of waste at an appropriate treatment and disposal facility in

accordance with applicable laws and regulations, and product characteristics at time of disposal. Incinerate in suitable combustion

chamber.

Contaminated packages should be as empty as possible. Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. Recycle following cleaning or dispose of at an authorised site.

SECTION 14: Transport information

This material is not subject to transport regulations.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.

SECTION 15: Regulatory information

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

National Regulations:

15.2 Chemical safety assessment: No data available.

SECTION 16: Other information

Revision Information:Not relevant.Key abbreviations or acronyms used:No data available.Key literature references and sources forNo data available.

data:

Wording of the R-phrases and H- None

statements in section 2 and 3:

Training information: No data available.

Inventory Status

On or in compliance with the inventory Australia AICS: On or in compliance with the inventory Canada DSL Inventory List: **EU EINECS List:** On or in compliance with the inventory Japan (ENCS) List: On or in compliance with the inventory China Inv. Existing Chemical Substances: Not compliance with the inventory On or in compliance with the inventory Korea Existing Chemicals Inv. (KECI): **Philippines PICCS:** On or in compliance with the inventory **US TSCA Inventory:** On or in compliance with the inventory New Zealand Inventory of Chemicals: On or in compliance with the inventory

Disclaimer:

The information given is based on data available for the material, the components of the material, and similar materials. The information is believed to be correct. It is given in good faith. This information should be used to make an independent determination of the methods to safeguard workers and the environment.