



### SECTION 1: Identification of the hazardous chemical or mixture and of the supplier or manufacturer

#### 1.1. GHS product identifier

Product form : Mixture  
Trade name : SHELL GADUS (TOR Armor Arctic)

#### 1.2. Other means of identification

No additional information available

#### 1.3. Recommended use of the chemical and restrictions on use

No additional information available

#### 1.4. Supplier's details

##### Manufacturer

Shell & Whitmore Reliability Solutions, LLC  
930 Whitmore Drive  
Rockwall, Texas, 75087  
USA  
T 1.800.381.6585 or 1.972.771.1000

#### 1.5. Emergency phone number

Emergency number : For Chemical Emergency Call CHEMTREC 24hr/day 7days/week  
Within USA and Canada: 1.800.424.9300  
Outside USA and Canada: +1.703.527.3887  
(collect calls accepted)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### GHS MX classification

Hazardous to the aquatic environment – Chronic Hazard, Category 3 H412 Harmful to aquatic life with long lasting effects.  
Full text of H-statements: see section 16

#### 2.2. Label elements

##### GHS MX labelling

Hazard statements (GHS MX) : H412 - Harmful to aquatic life with long lasting effects.  
Precautionary statements (GHS MX) : P273 - Avoid release to the environment.  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

#### 2.3. Other hazards which do not result in classification

No data available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

# SHELL GADUS (TOR Armor Arctic)

## Safety Data Sheet

According to the NOM-018-STPS-2015

### 3.2. Mixtures

Name	Product identifier	%	GHS MX classification
glycerol	CAS-No.: 56-81-5	35.24	Acute Tox. 4 (Inhalation:dust,mist), H332
talc	CAS-No.: 14807-96-6	10.395	Acute Tox. 5 (Dermal), H313
Alkanes, C13-16-iso-	CAS-No.: 68551-20-2	4.1679 – 4.21	Asp. Tox. 2, H305
Barium Sulfate	CAS-No.: 7727-43-7	4.2018	Aquatic Acute 2, H401 Aquatic Chronic 2, H411
Alcohols, C12-14 Secondary, ethoxylated	CAS-No.: 84133-50-6	3.2883	Acute Tox. 4 (Oral), H302
Alkyl Quaternary ammonium clay	CAS-No.: Proprietary	1.68	Acute Tox. 5 (Dermal), H313

## SECTION 4: First aid measures

### 4.1. Description of necessary first aid measures

No additional information available

### 4.2. Most important symptoms/effects, acute and delayed

No additional information available

### 4.3. Indication of immediate medical attention and special treatment needed, if necessary

No additional information available

## SECTION 5: Fire-fighting measures

### 5.1. Suitable extinguishing media

No additional information available

### 5.2. Specific hazards arising from the chemical

No additional information available

### 5.3. Special protective actions for fire-fighters

No additional information available

## SECTION 6: Measures to be taken in case of accidental spillage or accidental leakage

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

#### 6.1.1. For non-emergency personnel

No additional information available

#### 6.1.2. For emergency responders

No additional information available

### 6.2. Environmental precautions

No additional information available

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

No additional information available

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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

No additional information available

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

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### glycerol (56-81-5)

##### Mexico - Occupational Exposure Limits

Local name	Glicerina
OEL TWA [1]	10 mg/m <sup>3</sup> nieblas
Remark (MX)	Irritación del tracto respiratorio superior
Regulatory reference	NOM-010-STPS-2014

##### talc (14807-96-6)

##### Mexico - Occupational Exposure Limits

Local name	Talco sin fibras de asbesto
OEL STEL	2 mg/m <sup>3</sup> Fracción respirable; Este valor es para la materia particulada que contenga menos de un 1% de sílice cristalina y sin asbesto
Remark (MX)	Función pulmonar; fibrosis pulmonar; A4 (No clasificado como carcinógeno en humano Agente que puede ser cancerígeno para humanos pero que no puede ser concluyentemente asegurado por falta de datos. Estudios in vitro o animales no proveen indicaciones de carcinogenicidad suficientes para clasificar al agente en una de las otras categorías)
Regulatory reference	NOM-010-STPS-2014

##### Barium Sulfate (7727-43-7)

##### Mexico - Occupational Exposure Limits

Local name	Sulfato de bario
OEL TWA [1]	10 mg/m <sup>3</sup>
Remark (MX)	Neumoconiosis
Regulatory reference	NOM-010-STPS-2014

#### 8.2. Appropriate engineering controls

No additional information available

#### 8.3. Individual protection measures, such as personal protective equipment (PPE)

Hand protection : Neoprene or nitrile rubber gloves

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR), Neoprene rubber (HNBR)	2 (> 30 minutes)	0.3 mm - 0.6 mm		

Eye protection : Wear eye protection

Skin and body protection : Wear suitable protective clothing

Respiratory protection : No respiratory protection needed under normal use conditions

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## Safety Data Sheet

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### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Paste.
Colour	: Grey
Odour	: Mild odor
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: Not applicable
Flammability (solid, gas)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Vapour pressure	: No data available
Relative vapour density at 20°C	: No data available
Relative density	: No data available
Solubility	: Insoluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Partition coefficient n-octanol/water (Log Kow)	: No data available
Viscosity, kinematic	: > 30 mm <sup>2</sup> /s
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

#### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No additional information available

#### 10.2. Chemical stability

No additional information available

#### 10.3. Possibility of hazardous reactions

No additional information available

#### 10.4. Conditions to avoid

No additional information available

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

No additional information available

# SHELL GADUS (TOR Armor Arctic)

## Safety Data Sheet

According to the NOM-018-STPS-2015

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified

##### Alkanes, C13-16-iso- (68551-20-2)

LD50 oral rat	> 10000 mg/kg
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##### Alkyl Quaternary ammonium clay (Proprietary)

LD50 oral rat	> 5000 mg/kg
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LD50 dermal rat	> 2000 mg/kg
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ATE MX (dermal)	2500 mg/kg bodyweight
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##### Alcohols, C12-14 Secondary, ethoxylated (84133-50-6)

LD50 oral rat	> 412 mg/kg
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LD50 dermal rat	> 14000 mg/kg
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LC50 Inhalation - Rat (Dust/Mist)	1.06 mg/l/4h
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ATE MX (oral)	500 mg/kg bodyweight
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ATE MX (dust,mist)	1.06 mg/l/4h
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##### glycerol (56-81-5)

LD50 oral rat	27200 mg/kg (OECD 401: Acute Oral Toxicity, Rat, Female, Experimental value, Oral)
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LD50 dermal	56750 mg/kg (4 day(s), Guinea pig, Male / female, Experimental value, Dermal, 14 day(s))
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LD50 dermal rabbit	> 10000 mg/kg
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LC50 Inhalation - Rat	> 2.75 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male, Converted value, Inhalation (vapours))
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LC50 Inhalation - Rat (Vapours)	> 2.75 mg/l Source: ECHA
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LC50 Inhalation - Rat (Dust/Mist)	> 142 mg/l/4h
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ATE MX (oral)	27200 mg/kg bodyweight
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ATE MX (dermal)	56750 mg/kg bodyweight
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ATE MX (dust,mist)	1.5 mg/l/4h
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##### talc (14807-96-6)

LD50 oral rat	> 5000 mg/kg bodyweight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Male, Experimental value, Oral, 14 day(s))
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LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
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LC50 Inhalation - Rat	> 2.1 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 15 day(s))
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LC50 Inhalation - Rat (Dust/Mist)	> 2.1 mg/l Source: ECHA
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ATE MX (dermal)	2500 mg/kg bodyweight
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##### Barium Sulfate (7727-43-7)

LD50 oral rat	> 5000 mg/kg (OECD 401: Acute Oral Toxicity, Rat, Male, Experimental value, Oral, 14 day(s))
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Skin corrosion/irritation	: Not classified
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##### glycerol (56-81-5)

pH	10.5
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<b>talc (14807-96-6)</b>	
pH	9
<b>Barium Sulfate (7727-43-7)</b>	
pH	7 (5 %)
Serious eye damage/irritation	: Not classified
<b>glycerol (56-81-5)</b>	
pH	10.5
<b>talc (14807-96-6)</b>	
pH	9
<b>Barium Sulfate (7727-43-7)</b>	
pH	7 (5 %)
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
<b>talc (14807-96-6)</b>	
IARC group	3 - Not classifiable
<b>Barium Sulfate (7727-43-7)</b>	
NOAEL (chronic, oral, animal/male, 2 years)	60 mg/kg bodyweight Animal: rat, Animal sex: male, Remarks on results: other:Effect type: carcinogenicity (migrated information)
NOAEL (chronic, oral, animal/female, 2 years)	75 mg/kg bodyweight Animal: rat, Animal sex: female, Remarks on results: other:Effect type: carcinogenicity (migrated information)
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
<b>SHELL GADUS (TOR Armor Arctic)</b>	
Viscosity, kinematic	> 30 mm <sup>2</sup> /s
<b>Alkanes, C13-16-iso- (68551-20-2)</b>	
Viscosity, kinematic	3.3 mm <sup>2</sup> /s
Hydrocarbon	Yes
Animal studies and expert judgment for classification	False
<b>Alkyl Quaternary ammonium clay (Proprietary)</b>	
Animal studies and expert judgment for classification	False
<b>Alcohols, C12-14 Secondary, ethoxylated (84133-50-6)</b>	
Animal studies and expert judgment for classification	False
<b>glycerol (56-81-5)</b>	
Viscosity, kinematic	1119.746 mm <sup>2</sup> /s
Animal studies and expert judgment for classification	False
<b>talc (14807-96-6)</b>	
Animal studies and expert judgment for classification	False
<b>Barium Sulfate (7727-43-7)</b>	
Animal studies and expert judgment for classification	False

# SHELL GADUS (TOR Armor Arctic)

## Safety Data Sheet

According to the NOM-018-STPS-2015

### SECTION 12: Ecological information

#### 12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Harmful to aquatic life with long lasting effects.

##### glycerol (56-81-5)

LC50 - Fish [1]	54000 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	> 10000 mg/l (24 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)

##### talc (14807-96-6)

LC50 - Fish [1]	89581 mg/l (ECOSAR v1.00, 96 h, Pisces, Fresh water, QSAR)
EC50 96h - Algae [1]	7203 mg/l (ECOSAR v1.00, Algae, Fresh water, QSAR)

##### Barium Sulfate (7727-43-7)

LC50 - Fish [1]	> 174 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	32 mg/l
ErC50 algae	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 72h - Algae [1]	> 1.15 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	> 30.07 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

#### 12.2. Persistence and degradability

##### Alcohols, C12-14 Secondary, ethoxylated (84133-50-6)

Not rapidly degradable

##### glycerol (56-81-5)

Not rapidly degradable

Persistence and degradability	Not readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.87 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.16 g O <sub>2</sub> /g substance
ThOD	1.217 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.71

##### talc (14807-96-6)

Not rapidly degradable

Persistence and degradability	Biodegradability in soil: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

##### Barium Sulfate (7727-43-7)

Not rapidly degradable

Persistence and degradability	Not applicable.
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## Safety Data Sheet

According to the NOM-018-STPS-2015

Barium Sulfate (7727-43-7)	
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

### 12.3. Bioaccumulative potential

glycerol (56-81-5)	
Partition coefficient n-octanol/water (Log Pow)	-1.75 (Experimental value, Equivalent or similar to OECD 107, 25 °C)

talc (14807-96-6)	
BCF - Other aquatic organisms [1]	3.162 l/kg (BCFBAF v3.01, Fresh water, QSAR)
Partition coefficient n-octanol/water (Log Pow)	-9.4 (QSAR, KOWWIN, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

Barium Sulfate (7727-43-7)	
BCF - Fish [1]	1.2 – 74.4 l/kg (Lepomis macrochirus, Fresh water, Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

### 12.4. Mobility in soil

glycerol (56-81-5)	
Surface tension	0.0634 N/m (20 °C, 1000 g/l)

talc (14807-96-6)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.5 (log Koc, SRC PCKOCWIN v2.0, QSAR)

Barium Sulfate (7727-43-7)	
Ecology - soil	No (test) data on mobility of the substance available.

### 12.5. Other adverse effects

Ozone : Not classified

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

No additional information available

## SECTION 14: Transport information

In accordance with NOM / UN RTDG / IMDG / IATA

NOM	UN RTDG	IMDG	IATA
<b>14.1. UN number</b>			
Not regulated for transport			
<b>14.2. Proper Shipping Name</b>			
Not applicable	Not applicable	Not applicable	Not applicable

# SHELL GADUS (TOR Armor Arctic)

## Safety Data Sheet

According to the NOM-018-STPS-2015

NOM	UN RTDG	IMDG	IATA
<b>14.3. Transport hazard class(es)</b>			
Not applicable	Not applicable	Not applicable	Not applicable
<b>14.4. Packing group</b>			
Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>			
Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available			

### 14.6. Special precautions for user

**NOM**

No data available

**UN RTDG**

No data available

**IMDG**

No data available

**IATA**

No data available

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 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

**Alcohols, C12-14 Secondary, ethoxylated (84133-50-6):**

Listed in the INSQ (National Inventory of Chemical Substances)

**glycerol (56-81-5):**

Listed in the INSQ (National Inventory of Chemical Substances)

**talc (14807-96-6):**

Listed in the INSQ (National Inventory of Chemical Substances)

**Barium Sulfate (7727-43-7):**

Listed in the INSQ (National Inventory of Chemical Substances)

#### 15.2. International regulations

**Alkanes, C13-16-iso- (68551-20-2):**

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on the Canadian DSL (Domestic Substances List)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on KECI (Korean Existing Chemicals Inventory)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

Listed on NZIoC (New Zealand Inventory of Chemicals)

**Alkyl Quaternary ammonium clay (Proprietary):**

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

# SHELL GADUS (TOR Armor Arctic)

## Safety Data Sheet

According to the NOM-018-STPS-2015

### **Alcohols, C12-14 Secondary, ethoxylated (84133-50-6):**

Listed on the United States TSCA (Toxic Substances Control Act) inventory  
Listed on the Canadian DSL (Domestic Substances List)

### **glycerol (56-81-5):**

Listed on the United States TSCA (Toxic Substances Control Act) inventory  
Listed on the Canadian DSL (Domestic Substances List)

### **talc (14807-96-6):**

Listed on the United States TSCA (Toxic Substances Control Act) inventory  
Listed on the Canadian DSL (Domestic Substances List)

### **Barium Sulfate (7727-43-7):**

Listed on the United States TSCA (Toxic Substances Control Act) inventory  
Listed on the Canadian DSL (Domestic Substances List)

## SECTION 16: Other information including those related to the preparation and updating of safety data sheets

Issue date : 02/02/2022  
Revision date : 29/08/2022  
Supersedes : 07/03/2022

### Full text of H-statements

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H303	May be harmful if swallowed
H305	May be harmful if swallowed and enters airways
H312	Harmful in contact with skin.
H313	May be harmful in contact with skin
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H400	Very toxic to aquatic life.
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Safety Data Sheet (SDS), Mexico

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.