



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 (BioRail EP 2)

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Lubricant

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 – Acute Hazard, Category 3	H402	Harmful to aquatic life.
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

Adverse physicochemical, human health and environmental effects : Harmful in contact with skin, To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

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According to the NOM-018-STPS-2015

3.2. Mixtures

Name	Product identifier	%	GHS MX classification
Benzenesulfonic acid, C10-16-alkyl derivs.	CAS-No.: 68584-22-5	23.82	Acute Tox. 4 (Oral), H302 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
white mineral oil (petroleum)	CAS-No.: 8042-47-5	19.15	Acute Tox. 5 (Dermal), H313
POLYETHYLENE	CAS-No.: 9002-88-4	3.15	Acute Tox. 5 (Oral), H303

SECTION 4: First aid measures

4.1. Description of necessary first aid measures

First-aid measures general	: Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

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

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective actions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

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

Emergency procedures : Exercise caution. Spill area may be slippery. Avoid contact with skin, eyes and clothing.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product.

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Other information : Dispose of materials or solid residues at an authorized site.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Do not get in eyes, on skin, or on clothing. Wear personal protective equipment.
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Appearance : Grease.
Colour : brown
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 : > 221 °C (Open cup)
Flammability (solid, gas) : Non flammable.
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 : > 25 mm²/s
Viscosity, dynamic : No data available

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Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available

9.2. Other information

VOC content : < 0.1 %

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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

POLYETHYLENE (9002-88-4)

LD50 oral rat	> 2000 mg/kg (Rat, Oral)
ATE MX (oral)	2500 mg/kg bodyweight

white mineral oil (petroleum) (8042-47-5)

LD50 oral rat	> 5000 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Read-across, Oral)
LD50 dermal rabbit	> 2000 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Read-across, Dermal)
LC50 Inhalation - Rat	> 5 mg/l (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Read-across, Inhalation (aerosol))
ATE MX (dermal)	2500 mg/kg bodyweight

Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5)

LD50 oral rat	1350 mg/kg Source: IUCLID;
LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

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LC50 Inhalation - Rat	> 1.9 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
ATE MX (oral)	1350 mg/kg bodyweight
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
POLYETHYLENE (9002-88-4)	
IARC group	3 - Not classifiable
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5)	
NOAEL (oral, rat, 90 days)	500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)
NOAEL (dermal, rat/rabbit, 90 days)	> 1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)
Aspiration hazard	: Not classified
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Viscosity, kinematic	> 25 mm ² /s
POLYETHYLENE (9002-88-4)	
Animal studies and expert judgment for classification	False
white mineral oil (petroleum) (8042-47-5)	
Viscosity, kinematic	> 3 mm ² /s (40 °C, ISO 3104: Determination of kinematic viscosity and calculation of dynamic viscosity)
Animal studies and expert judgment for classification	False
Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5)	
Animal studies and expert judgment for classification	False

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Harmful to aquatic life.
Hazardous to the aquatic environment, long-term (chronic)	: Harmful to aquatic life with long lasting effects.

white mineral oil (petroleum) (8042-47-5)	
LC50 - Fish [1]	> 100 mg/l
Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5)	
EC50 96h - Algae [1]	> 1000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

12.2. Persistence and degradability

POLYETHYLENE (9002-88-4)	
Not rapidly degradable	

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POLYETHYLENE (9002-88-4)	
Persistence and degradability	Not degradable in the soil. Not readily biodegradable in water.
white mineral oil (petroleum) (8042-47-5)	
Persistence and degradability	Not rapidly degradable.
Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5)	
Not rapidly degradable	

12.3. Bioaccumulative potential

POLYETHYLENE (9002-88-4)	
Bioaccumulative potential	No bioaccumulation data available.
white mineral oil (petroleum) (8042-47-5)	
Partition coefficient n-octanol/water (Log Pow)	> 6 (calculated value)
Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5)	
Partition coefficient n-octanol/water (Log Pow)	2

12.4. Mobility in soil

white mineral oil (petroleum) (8042-47-5)	
Ecology - soil	Product adsorbs onto the soil.
Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5)	
Mobility in soil	1064

12.5. Other adverse effects

Ozone : Not classified

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with NOM / UN RTDG / IMDG / IATA

NOM	UN RTDG	IMDG	IATA
14.1. UN number			
Not regulated for transport			
14.2. Proper Shipping Name			
Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)			
Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable

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NOM	UN RTDG	IMDG	IATA
14.5. Environmental hazards			
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

POLYETHYLENE (9002-88-4):

Listed in the INSQ (National Inventory of Chemical Substances)

white mineral oil (petroleum) (8042-47-5):

Listed in the INSQ (National Inventory of Chemical Substances)

15.2. International regulations

POLYETHYLENE (9002-88-4):

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

Listed on the Canadian DSL (Domestic Substances List)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5):

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)

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

Issue date : 10/11/2021
Revision date : 21/12/2022
Supersedes : 10/08/2022

Full text of H-statements

H302	Harmful if swallowed.
H303	May be harmful if swallowed

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Full text of H-statements	
H313	May be harmful in contact with skin
H401	Toxic to aquatic life
H402	Harmful to aquatic life
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.