

In accordance with decree 1496 of 2018

3 X 1 RELEASE AGENT 20002531

SECTION 1: PRODUCT ID'ENTIFICATION

1.1

GHS identifier of the product: 3 X 1 RELEASE AGENT

20002531

1.2 Recommended chemical use and restrictions:

Relevant uses: Release agent. Used by professional users only.

Not recommended uses: Any use not specified in this section or in section 7.3.

1.3 Details of the supplier.

GLASST INNOVATION COMPANY Carrera 32 # 13 – 49, Of 504 050021.- Antioquia - Colombia Tfn.: 57 4 444 95 77 ventas@glasst.co

1.4 Emergency telephone number:

http://www.glasst.co

CISTEMA SURA Colombia at 018000 51 14 14, outside Colombia (0574) 4444578

SECTION 2: HAZARD(S) IDENTIFICATION

2.1 Classification of the substance or mixture:

GHS

The product has been classified in accordance with Decree 1496 of 2018, which adopts the Globally Harmonized System of Classification and Labeling of Chemicals and establishes other provisions for chemical safety.

Tox. Asp. 1: Respiratory Hazard, Category 1, H304

2.2 GHS label elements, including precautionary statements:

GHS:

Hazardous



Hazard indications:

Tox. Asp. 1: H304 - May be fatal if swallowed and if it enters the respiratory tract.

Precautionary statements:

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

P331: DO NOT induce vomiting.

P405: Keep locked up

P501: Dispose of contents/container in accordance with regulations for hazardous waste or containers and residual packaging respectively.

2.3 Other hazards not leading to a classification:

Not relevant

SECTION 3: COMPOSITION/INFORMATION ON COMPONENTS

3.1 Substances:

Not applicable

3.2 Mixtures:

Chemical description: Chemical based mixture

Components:

According to Decree 1496 of 2018, the product presents:

Identification	Chemical name/classification	Concentrati
CAS: 8042-47-5	White mineral oil, ←20.5cSt (104 °F)	50 - <75 %

For further information on the hazardousness substances, see sections 11, 12 and 16. The Carcinogenicity classification of the substances has been established on the basis of the IARC classification in accordance with the GHS classification system, so for information on the IARC classification see section 11.



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SECTION 4: FIRST AID MEASURES

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4.1 Description of recommended first aid measures:

Symptoms as a consequence of poisoning may occur subsequently after exposure, so in case of doubt, direct exposure to the chemical or persistent discomfort seek medical attention and show the SDS for this product.

Inhalation:

This product does not contain substances classified as hazardous by inhalation. However, in case of symptoms of intoxication, move the affected person from the area of exposure to fresh air at once. Seek medical attention if symptoms worsen or persist.

Skin contact:

In case of contact it is recommended to clean the affected area with water and neutral soap. In case of skin alterations (itching, redness, rashes, blisters...), seek medical advice with this Safety Data Sheet.

Eye contact:

It is a product that does not contain substances classified as hazardous in contact with eyes. Rinse for at least 15 minutes with plenty of water at room temperature, avoiding rubbing or closing the eyes.

Ingestion/aspiration:

Seek immediate medical attention by showing the SDS for this product. Do not induce vomiting, if vomiting occurs, keep head tilted forward to avoid aspiration. In case of loss of consciousness, do not administer anything by mouth until medical attention has been given. Rinse mouth and throat, as there is a possibility that they may have been affected by ingestion. Keep the affected person at rest.

4.2 Most relevant symptoms/effects, acute, or delayed:

Acute and delayed effects are as listed in sections 2 and 11.

4.3 Indication of any medical attention special or treatment needed:

Not relevant.

SECTION 5: FIREFIGHTING MEASURES

5.1 Suitable extinguishing agents:

The product is not flammable under normal storage, handling, and use conditions. In case of ignition as a result of improper handling, storage or use preferably use multi-purpose powder extinguishers (ABC powder). It is NOT RECOMMENDED to use water as an extinguishing agent.

5.2 Specific chemical hazards:

As a result of combustion or thermal decomposition, the reaction might generate by-products which may be highly toxic and, consequently, may present a heightened health hazard.

5.3 Special measures to be taken by firefighters:

Depending on the magnitude of the fire, it may be necessary to wear full protective clothing and self-contained breathing apparatus. Have a minimum number of emergency facilities or emergency response elements (fire blankets, and portable first aid kit, etc.).

Additional provisions:

Act in accordance with the Indoor Emergency Plan and the Information Sheets on what action to take in the event of accidents and other emergencies. Suppress any source of ignition. In case of fire, cool containers and storage tanks of all the potentially flammable or explosive products due to high temperatures. Avoid spillage of products used to extinguish the fire into the aquatic environment.

SECTION 6: MEASURES TO BE TAKEN IN CASE OF ACCIDENTAL RELEASE

6.1 Personal precautions, protective equipment, and emergency procedures:

Isolate leaks as long as it does not pose an additional risk to people performing this function. Potential exposure to spilled products requires the use of personal protective equipment (see section 8). Evacuate the area and keep unprotected personnel away.

6.2 Environmental precautions:

Products not classified as hazardous to the environment should be kept away from drains, surfaces, and groundwater.

6.3 Methods and materials for containment spill and clean up:

Recommended:

Absorb spillage with sand or inert absorbent and transfer to a safe place. Do not absorb in sawdust or other combustible absorbents. For disposal considerations, refer to section 13.



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SECTION 6: MEASURES TO BE TAKEN IN CASE OF ACCIDENTAL RELEASE (continued)

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions to be taken to ensure safe handling:

A.- General precautions:

Comply with current legislation for prevention of occupational hazards. Keep containers hermetically sealed. Control spills and residues by eliminating them with safe methods (section 6). Avoid free spillage from the container. Maintain order and cleanliness where hazardous products are handled.

B.- Technical recommendations for fire and explosion prevention.

The product is not flammable under normal storage, handling, and use conditions. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that could affect flammable products. See section 10 for conditions and materials to be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks.

Do not eat, drink, or smoke in work areas; wash hands after each use and remove contaminated clothing and protective equipment before entering eating areas.

D.- Technical recommendations to prevent environmental risks.

It is advisable to have absorbent material in the vicinity of the product (see section 6.3).

7.2 Conditions for safe storage include any incompatibilities:

A.- Technical storage measures.

Minimum temperature: 41 °F (5°C) Keep from freezing Maximum temperature: Store below 100 °F (38°C)

Maximum Time: 18 months

B.- General storage conditions

Avoid heat sources, radiation, static electricity, and contact with food. For additional information see section 10.5.

7.3 Specific end uses:

Except for the indications already specified, no special recommendations need to be made as to the uses of this product.

SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1 Control parameters:

Substance has an occupational exposure limit value to be monitored in the working environment (ACGIH): There are no environmental limit values for the substances constituting the product.

8.2 Appropriate engineering controls:

A.- Individual protective measures, such as personal protective equipment (PPE).

As a preventive measure, the use of basic personal protective equipment is recommended. For further information on personal protective equipment (storage, use, cleaning, maintenance, and protection class...) please refer to the information leaflet provided by the PPE manufacturer. The indications contained in this point refer to the undiluted product. The protection measures for diluted products may vary depending on the degree of dilution, use, and method of application, etc. In order to determine the obligation to install emergency showers and/or eyewashes in warehouses, the applicable regulations for the storage of chemical products should be taken into account. For more information see sections 7.1 and 7.2.

All the information included here is a recommendation and needs to be specified by the occupational risk prevention services as it is not known what additional prevention measures the company may have in place.

B.- Respiratory protection.

The use of protective equipment will be necessary in the case of mist formation or in the case of exceeding the occupational exposure limits if they exist (See Section 8.1)

C.- Specific hand protection.



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SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION (continued)

Pictogram	PPE	Comments
Mandatory hand	Protective Gloves	Replace gloves at any sign of deterioration. For prolonged periods of exposure to the product for professional/industrial users, the use of chemical protective gloves is recommended.

As the product is a mixture of different materials, the resistance of the glove material cannot be reliably calculated in advance and must therefore be checked prior to application.

D.- Eye and face protection

Pictogram	PPE	Comments
Mandatory face protection	Safety glasses against splashes and/or splattering	Clean daily and disinfect periodically according to manufacturer's instructions. Recommended for use in case of splashing hazard.

E.- Body protection

Pictogram	PPE	Comments	
	Work clothes	Replace at any sign of deterioration. For prolonged periods of exposure to the product for professional/industrial users, chemical protective work clothing is recommended.	
	Slip-resistant work shoes	Replace at any sign of deterioration.	

F.- Complementary emergency measures.

Emergency measures	Rules	Emergency Measures	Rules	
Emergency shower	ANSI Z358-1	O +	DIN 12 899	
	ISO 3864-1:2011, ISO 3864-4:2011	Eyewash	ISO 3864-1:2011, ISO 3864-4:2011	

Environmental exposure controls:

It is recommended to avoid spillage of both the product and its container in the environment. For additional information see section 7.1

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES AND SAFETY CHARACTERISTICS

Information on basic physical and chemical properties: 9.1

For complete information, see product data sheet/specification sheet.

Physical appearance:

Physical state at 68 °F (20°C): Liquid

Aspect: Not determined Color: Not determined Odor: Not determined Not relevant * Olfactory threshold:

Volatility:

Boiling temperature at atmospheric pressure: 212 - 680°F (100 - 360°C)

Vapor pressure at 68 °F (20°C): 2061 Pa

Vapor pressure at 122 °F (50°C): 10859,98 Pa (10,86 kPa)

Evaporation rate at 68 °F (20°C): Not relevant *

^{*}Not relevant due to the nature of the product because no characteristic information of its hazardousness is provided.



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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES AND SAFETY CHARACTERISTICS (continued)

Product Characterization:

56.09 lb/ft3 (898.48 kg/m3) Density at 68 °F (20°C): 0.056 lb/ft3 (0.897 kg/m3) Relative density at 68 °F (20°C):

Dynamic viscosity at 68 °F (20°C): Not relevant * Kinematic viscosity at 68 °F (20°C): Not relevant * Kinematic viscosity at 104 °F (40°C): <20.5 cSt

Concentration: Not relevant *#..\Desktop\Nueva carpeta (2)\Nueva

Not relevant * рН: Vapor density at 68 °F (20°C): Not relevant * Partition coefficient n-octanol/water at 68 °F (20°C): Not relevant * Solubility in water at 68 °F (20°C): Not relevant *

Solubility property: Not relevant * Decomposition temperature: Not relevant * Melting point/freezing point: Not relevant * Explosive properties: Not relevant * Oxidizing properties: Not relevant *

Flammability:

Flash point: Non-flammable >253.4 °F (123°C)

Flammability (solid, gas): Not relevant * Self-ignition temperature: 615.2 °F (324°C) Lower flammability limit: Not relevant * Not relevant * Upper flammability limit:

Explosiveness:

Lower explosive limit: Not relevant * Upper explosive limit: Not relevant *

9.2 Additional Information:

> Surface tension at 68 °F (20°C): Not relevant * Refractive index: Not relevant *

*Not relevant due to the nature of the product because no characteristic information of its hazardousness is provided.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: 10.1

No hazardous reactions are expected if the technical instructions for chemical storage are followed. See section 7.#..\Desktop\Nueva carpeta (2)\Nueva carpeta\SAFETY_SHEET_3x1_GLASST.rtf#_Hlk80175366 1,12507,12623,0,No hazardous reactions are expec

10.2 Chemical stability:

Possibility of dangerous reactions: 10.3

Under the conditions indicated, no dangerous reactions are expected that could result in excessive pressure or temperatures.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and Friction	Contact with the air	Heating	Solar light	Humidity
Not	Not applicable	Not applicable	Not applicable	Not applicable

10.5 Incompatible materials

	Acid	Water Combustible Substances Fuel Materials Otl		Combustible Substances Fuel Materials	
Avoid strong acids		Not applicable	Not applicable	Not applicable	Avoid alkalis or strong
ı	Hazardous decomposition products:				bases

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SECTION 10: STABILITY AND REACTIVITY (continued)

See sections 10.3, 10.4, and 10.5 for specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemicals may be released as a result of decomposition: carbon dioxide (CO2), carbon monoxide, and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

111 Information on possible routes of exposure:

There is no experimental data available on the product itself concerning toxicological properties.

Hazardous effects on health:

In case of repeated, prolonged exposure, or at concentrations above the occupational exposure limits, adverse health effects may occur depending on the route of exposure:

- Ingestion (acute effect):
 - -Acute toxicity. Based on the available data, the classification criteria are not met, and no substances are classified as hazardous if swallowed. For further information see section 3.
 - Corrosivity/Irritability: Based on the available data, the classification criteria are not met, and no substances are classified as hazardous by this effect. For further information see section 3.
- Inhalation (acute effect):
 - Acute toxicity: Based on the available data, the classification criteria are not met, and no substances are classified as hazardous by inhalation. For further information see section 3.
 - Corrosivity/Irritability: Based on the available data, the classification criteria are not met, and no substances are classified as hazardous by this effect. For further information see section 3.
- Skin and eye contact (acute effect):
 - Skin contact: Based on the available data, the classification criteria are not met, and no substances are classified as hazardous in contact with skin. For further information see section 3.
 - Eye contact: Based on the available data, the classification criteria are not met, and no substances are classified as hazardous by eye contact. For further information see section 3.
- Carcinogenic, mutagenic, and reprotoxic (CRM) substances:
 - Carcinogenic: Based on the available data, the classification criteria were not met, and no substances are classified as hazardous for the effects described. For further information see section 3.

IARC: Not relevant.

- Mutagenicity: Based on the available the data, the classification criteria were not met, and no substances are classified as hazardous for this effect. For further information see section 3.
- Reprotoxic: Based on the available data, the classification criteria were not met, and no substances are classified as hazardous for this effect. For further information see section 3.
- Sensitization effects
 - Respiratory: Based on the available data, the classification criteria were not met, and no substances are classified as hazardous with sensitizing effects. For further information see sections 2, 3 and 15.
 - Cutaneous: Based on the available data, the classification criteria were not met, and there are no substances classified as hazardous for this effect. For further information see section 3.
- Specific target organ toxicity (STOT)-single exposure:
 - Based on the available data, the classification criteria were not met, and no substances are classified as hazardous for this effect. For further information see section 3.
- Specific target organ toxicity (STOT)-repeated exposure:
 - Specific target organ toxicity (STOT)-repeated exposure: Based on the available data, the classification criteria were not met, and no substances are classified as hazardous for this effect. For further information see section 3.
 - Skin: Based on the available data, the classification criteria were not met, and no substances are classified as hazardous for this effect. For more information see section 3.
- Aspiration hazard:

Ingestion of a substantial dose may cause lung damage.

Further Information:

Not Relevant

Substance-specific toxicological information:



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SECTION II: TOXICOLOGICAL INFORMATION (continued)

Identification	Acute Toxicity		Class
White mineral oil, <=20.5cSt (104°F)	DL50 oral	5100 ppm	Rate
CAS: 8042-47-5	DL50 dermal	Not relevant	
	CL50 inhalation	Not relevant	

SECTION 12: ECOTOXICOLOGICAL INFORMATION

12.1 TOXICITY:

ETA-CE50 (O. mykiss, calc., 48 h): > 20 mg/l ETA-CE50 (D. magna, calc., 48 h): > 20 mg/l ETA-CE50 (P. subcapitata, calc., 48 h): > 20 mg/l ETA-CE50 (T. pyriformis, calc., 48 h): > 20 mg/l ETA-CSEO (D. rerio, calc., 14 d): > 0,2 mg/l

12.2 PERSISTENCE AND DEGRADABILITY BIODEGRADABILITY:

Highly biodegradable product

12.3 BIOACCUMULATION POTENTIAL Log Ko/w: N/D

BIOACCUMULATION IN FISH - BCF (OECD 305): N/D

MOBILITY IN SOIL LogKoc: N/D

12.4 HENRY'S CONSTANT (20°C): N/D

12.5 OTHER ADVERSE EFFECTS AOX and metal content: Does not contain organic halogens or heavy metals.

SECTION 13: INFORMATION CONCERNING PRODUCT DISPOSAL

13.1 Elimination methods:

Waste management (disposal and recovery):

Consult the authorized waste manager for recovery and disposal operations. If the container has been in direct contact with the product, it should be managed in the same way as the product itself, otherwise it should be managed as non-hazardous waste. Discharge into watercourses is not recommended. See section 6.2

Legislative provisions related to waste management:

Legislation related to waste management:

Decree 4741 of 2005, which partially regulates the prevention and management of hazardous waste generated within the framework of integrated waste management.#..\Desktop\Nueva carpeta (2)\Nueva

SECTION 14: TRANSPORT INFORMATION

This product is not regulated for transport.

SECTION 15: REGULATORY INFORMATION

15.1 Specific safety, health, and environmental provisions for the product concerned:

NTP (National Toxicology Program): Not relevant

Special provisions for the protection of people or the environment:

It is recommended that the information compiled in this material safety data sheet be used as input data in a risk assessment of the local circumstances in order to establish the necessary risk prevention measures for the handling, use, storage, and disposal of this product.

Other legislation:



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SECTION 15: REGULATORY INFORMATION (continued)

Resolution 0312 of 2019 - New minimum OSHMS standards.

CONPES 3868 - Risk management policy associated with the use of chemical substances.

Decree 1079 of 2015 - single regulatory decree of the transport sector.

NTC 1692 - Transport of dangerous goods. Definitions, classification, marking, labeling, and placarding.

NTC 4532- Transport of dangerous goods. Emergency cards for transport of materials. Elaboration

Decree number 4741 of 2005

Decree 1299 of 2008 - Regulates the department of environmental management of companies at the industrial state level.

Decree 321 of 1999 - Adopts the National Contingency Plan against spills of hydrocarbons, derivatives, and harmful substances.

NTC 4702 - 1 - Packaging and Containers for Transportation of Class 1 Dangerous Goods. Explosives

NTC 4702 - 2 - Packaging and Containers for Transport of Dangerous Goods Class 2. Gases

NTC 4702 - 3 - Packaging and Containers for Transport of Dangerous Goods Class 3. Flammable Liquids

NTC 4702 - 4 - Packaging and Containers for Transport of Dangerous Goods Class 4. Flammable Solids, Substances that present a risk of spontaneous combustion, and substances that in contact with water give off flammable gases.

NTC 4702 - 5 - Packaging and Containers for Transport of Dangerous Goods Class 5. Combustible Substances and Organic Peroxides.

NTC 4702 - 6 - Packaging and Containers for Transport of Dangerous Goods Class 6. Toxic and Infectious Substances.

NTC 4702 - 8 - Packaging and Containers for Transport of Dangerous Goods Class 8. Corrosive Substances

NTC 4702 - 9 - Packaging and Containers for Transport of Dangerous Goods Class 9. Miscellaneous Dangerous Substances

SECTION 16: OTHER INFORMATION

Legislation applicable to Material Safety Data Sheets:

This material safety data sheet has been developed in accordance with Colombian technical standard NTC 4435:2010.

Texts of the legislative phrases referred to in section 2:

H304: May be fatal if swallowed and if it enters the respiratory tract.

Texts of the legislative phrases referred to in section 3:

The phrases indicated do not refer to the product itself, however, they are for information purposes only and refer to the individual components listed in section 3#.\Desktop\Nueva carpeta (2)\Nueva carpeta\SafetySheet_ReleaseAgent_MAX_GLASST.rtf#_HIk80180945

Tox. Asp. 1: H304 - May be fatal if swallowed and if it enters the respiratory tract.

Trainina recommendations

Minimum training in occupational risk prevention is recommended for personnel who will handle this product in order to facilitate the proper understanding and interpretation of this safety material data sheet, as well as the product labeling.

Main bibliographic sources:

Colombian Institute of Technical Standards and Certification (ICONTEC)

IARC: International Agency for Research on Cancer.

OSHA: Occupational Safety and Health Administration, U.S. Department of Labor

NTP: National Toxicology Program

TOXNET: Toxicology data network

Abbreviations and acronyms:

IMDG: International Maritime Dangerous Goods Code

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

COD: Chemical Oxygen Demand

BOD5: Biological Oxygen Demand at 5 days

BCF: bioconcentration factor

LD50: lethal dose 50

LC50: lethal concentration 50

EC50: effective concentration 50

Log POW: logarithm of octanol-water partition coefficient

Koc: partition coefficient of organic carbon

The information contained in this safety data sheet is based on sources, technical knowledge, and legislation in force at European and national level, and the accuracy of this information cannot be guaranteed. This information cannot be considered as a guarantee of the properties of the product because it is simply a description of the safety requirements. The methodology and working conditions of the end users are beyond our knowledge and control, and it is always the users ultimate responsibility to take the necessary measures to comply with the legislative requirements for handling, storage, use and disposal of chemicals. The information in the material safety data sheet relates only to this product, which should not be used for purposes other than those specified

END OF MATERIAL SAFETY DATA SHEET