







SAFETY DATA SHEET

Product	Personal Protection Elements
SULFURGRAN	 Gloves  Respiratory protection  Safety goggles

SECTION 1. PRODUCT IDENTIFICATION							
GHS Product identifier				Sulfugran			
Other means of identification				Sulphur			
Recommended use of the chemical and restrictions on use In the agricultural industry as fertilizer.				EMERGENCY PHONE NUMBER 24 HS (0291) 459-8188 - (0291) 459-8008 - Security (0291) 154-050419 – Safety Health (0291) 459-8196 – Medical Service			
SUPPLIER Produquímica Industria e Comércio S.A. Endereço: Rodovia Dom Pedro I, 469, Km 4,7 Complemento: Predio B, Paratei, Jacarei – SP CEP: 12332-000 - Brasil				DISTRIBUTOR Profertil S.A. Román Subiza Esq. Prefectura (Puerto Nuevo). CP 2900-San Nicolás -Buenos Aires, Argentina			
SECTION 2. HAZARD IDENTIFICATION							
Classification of the substance	Classification		Labeled				Hazard indication code
	Classification	Labeled	Pictogram		Signal word	Hazard indication	
			GHS	Model Regulations of the UN			
Skin corrosion/irritation	2		Not required	Danger	It causes skin irritation	H315	
Substances and mixtures that react spontaneously	Type E/F			Danger	It can catch fire when heated	H242	
Classification of the substance	It is not carcinogenic, mutagenic or teratogenic according to ACGIH, EPA, IARC, OSHA. Contact with dust from this product may cause irritation to the eyes, respiratory tract and skin. The product can catch fire in the presence of heat or sparks and release toxic gases.						
SECTION 3. INFORMATION ON INGREDIENTS							
Composition:			Comercialization: Granulated in bag and in bulk.				
Common name	Synonyms of the Substance	CAS number	Chemical family	Formula	Composition (% by weight)		
Sulphur	Sublimate sulphur	7704-34-9	Non-metals	S	>90%		
SECTION 4. FIRST-AID MEASURES							
Contact with eyes	Contact with dust may cause irritation to the eyes, so immediately rinse the eyes with plenty of water, for at least 15 minutes, keeping the eyelids open. Remove contact lenses when they are present and can be done easily. Continue washing. Request medical attention.						



Contact with skin	Dermal contact presents a significant danger, so immediately wash the affected area with plenty of soap and water, for at least 15 minutes, brushing loose particles deposited on the skin. Remove contaminated clothing and wash before reuse. In case of skin irritation consult a doctor.
Inhalation	It could cause irritation of the airways, cough and respiratory distress. In this case if breathing is difficult, transport the victim outdoors and keep them at rest in a position that facilitates their breathing. If necessary, seek medical attention.
Ingestion	It can cause vomiting, salivation, numbness, trembling and respiratory distress. DO NOT induce vomiting. Rinse mouth with water. Never give anything orally to an unconscious person. Call the doctor. If vomiting occurs spontaneously, place the victim on their side to reduce the risk of aspiration.
SECTION 5. FIRE-FIGHTING MEASURES	
Suitable extinguishing media	In case of fire, use dry chemical powder, CO ₂ , water fog or foam. Large fires: Use water fog or alcohol resistant foam. Do not use water jets directly; contain fire control water for later disposal. Do not disperse the material. Remove materials that can catch fire from the fire area if this can be done without risk. Extinguishing media contraindicated: The use of water jet may be ineffective in fire fighting.
Specific hazards arising from the chemical	In case of combustion sulphur oxides are generated. Sulphur is combustible and produces sulphurous anhydride gases SO ₂ which cause irritation and irritation in the respiratory tract. Sulphur has a low autoignition temperature.
Special protective actions for fire-fighters	In case of fumes or gases, those responsible for controlling the fire should use Autonomous Breathing Equipment and Structural Equipment for Firefighters. Evacuate the affected area, stand with your back to the wind so as not to inhale the flue gases. The ignition can be caused by heat, spark or flame. Dust suspended in the atmosphere can be explosive.
SECTION 6. ACCIDENTAL RELEASE MEASURES	
Personal precautions, protective equipment and emergency procedures	Eliminate all sources of ignition (do not smoke, do not use flares, sparks or flames in the danger area) Avoid all contact with eyes and skin and respiratory system. Use the corresponding PPEs. In case of dust generation it should be ventilated. Let the dust precipitate. Evacuate people from the spill area until completely cleaned. Absorb with dry sand, earth or other similar material (to avoid dust formation).
Environmental precautions	Prevent spills from entering drains, surface water courses, groundwater, etc. Dispose of according to local, regional, national or international regulations, provided it cannot be reused.
Methods and materials for containment and cleaning up	Stay with your back to the wind, sweep and deposit in airtight containers, for processing or disposal. Collect spilled material with mechanical means (manual and/or mechanical shovels, industrial vacuum cleaners, etc.) avoiding the generation of heat or sparks. Large spills: collect and deposit solid spills in closed containers.
SECTION 7. HANDLING AND STORAGE	
Precautions for safe handling	Keep away from heat, hot surfaces, sparks, open flames and other sources of ignition. Avoid the generation of dust and spills into the water. Use adequate ventilation to maintain exposure within the allowed limits. Prevent handling with incompatible substances. Prohibited to eat, drink or smoke in work areas. Wash your hands and face thoroughly after each product handling and systematically before entering the dining rooms or leaving the workplace.
Conditions for safe storage	Always keep in the original containers. Store in dry, temperate and well ventilated areas, the temperatures of the storage place will not exceed +/- 40 ° C Store separately from incompatible substances. Do not store in corrosive metals: aluminum, carbon steel

SECCION 8. CONTROLES DE EXPOSICION/PROTECCION PERSONAL			
Control parameters	There are no specific occupational exposure limits. ACGIH TLV-TWA / Res. MTEySS N° 295/03: (insoluble) not-otherwise specified particles (PNEOF) 10 mg/m ³ in 8 hours for inhalable particles and 3 mg/m ³ in 8 hours for breathable particles. OSHA PEL: Total powder: 15 mg/m ³ TWA (8 hours), breathable fraction: 5 mg/m ³ TWA (8 hours).		
Appropriate engineering controls	Use grounding and equipotential bonding of the container and receiving equipment. Maintain airborne dust concentrations below occupational exposure limits. If possible apply general ventilation If necessary, local ventilation by aspiration should be used.		
Individual protection measures, personal protective equipment (PPEs)	To avoid contact with skin or eyes, wear long-sleeved clothing that protects the limbs and/or bodysuit, leather gloves, safety goggles. In the presence of high concentrations of dust dispersed in the air, use waterproof bodysuit, PVC gloves and respiratory protection approved for dust.		
SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES			
Appearance		Physical state: Solid (Dry granulated) Colour: Yellow	
Odour	Characteristic	Vapour pressure	0 - 0,001 Pa 20 at 40°C
Odour threshold	Not available	Vapour density	Not available
pH (10% sol. in water)	Not available	Solubility	Low solubility in water (<1mg/l)
Melting/Solidification Point	113 - 120 °C	Partition coefficient: n-octanol/water	Not applicable
Initial boiling point and boiling range	444.6 °C (at 101.3kpa)	Auto-ignition temperature	Not available
Flash point	160°C (Method c.c.)	Decomposition temperature	>250°C
Evaporation rate	Not available	Relative density	Not available
Flammability	Flammable solid	Apparent density	2.065 kg/m ³
Upper/lower flammability or explosive limits	Not available	Viscosity	Not available
SECTION 10. STABILITY AND REACTIVITY			
Chemical stability	It does not cause dangerous reactions if handled and stored in accordance with the regulations. Stored at normal ambient temperatures (from -40 ° C to + 40 ° C), the product is stable and does not require stabilizers		
Possibility of hazardous reactions	It easily attacks the steel in the presence of moisture due to the slight acidity. May react in the presence of incompatible materials.		
Conditions to be avoided	Avoid dust formation, heat, sources of sparks, moisture and incompatible materials.		
Incompatible materials	Incompatible with oxidizing agents, some finely divided metals and their oxides. Acetylides Mineral acids, carbides, chlorates. Silicon compounds. Ethers. Fluoride, halogen halides. Hydrides Nitrates Nitrites Peroxides Sulphides...		
Dangerous products of decomposition	When burned, it releases the toxic gas sulphur dioxide. Molten sulphur releases hydrogen sulphide toxic and flammable gas.		
Special Observations	The equipment must be grounded		

SECTION 11. TOXICOLOGICAL INFORMATION	
Acute toxicity	Unclassified DL ₅₀ : >2000 mg/kg (oral rat) CL ₅₀ : > 5.43 g/m ³ /4h (inhalation rat) DL ₅₀ : >2000 mg/kg (Dermal rat)
Skin corrosion/irritation	Studies in rabbits state that sulphur is irritating but not corrosive to the skin of rabbits.
Serious eye damage	According to the observations of the study in rabbits, sulphur does not require classification as an eye irritant.
Respiratory or skin sensitization	Not classified as skin sensitizer.
Germ cell mutagenicity	Sulfur powder was not mutagenic in the Ames test until the highest concentration tested of 5000 µ g/plate.
Carcinogenicity	It is not identified as a probable, possible or confirmed human carcinogen by IARC
Reproductive toxicity	Unspecified.
Specific target organ toxicity –single exposure	Unspecified.
Specific target organ toxicity –repeated exposure	Unspecified.
Aspiration hazard	Unspecified.
SECTION 12. ECOTOXICOLOGICAL INFORMATION	
Toxicidad	CL ₅₀ /96hr(fish): > 100mg/l Not expected to be toxic to aquatic life
Persistence and degradability	Not applicable
Bioaccumulation potential	Not available
Mobility in soil	Not available
Results of ev. PBT and mPmB	This substance / mixture does not meet the PBT or vPvB criteria of Annex III of the REACH regulation
Other adverse effects	Not available.
SECTION 13. DISPOSAL CONSIDERATIONS	
Disposal methods	Recovery and reuse of the material whenever possible.
Manipulation	Place the material in containers suitable for use or disposal. The corresponding PPEs should be used. Take the necessary measures to prevent accidental spillage of the product into sewers or waterways, in case of rupture of the containers or transfer systems.
Treatment	Depending on the type of contamination, consult Safety Health. If the material cannot be recovered and / or reused, it must be treated as a non-dangerous industrial waste.



SECTION 14. TRANSPORT INFORMATION	
International regulations	Mercosur Dangerous Goods Transportation Agreement [Acuerdo Sobre Transporte de Mercancías Peligrosas del Mercosur]. National Traffic Law 24,499 National Dangerous Waste Law 24,051 General Regulations for the Transport of Dangerous Goods, DEC 779/95 Resolution 195/97 Technical Standards. IATA, IMO / IMDG / ADN, RID / ADRo.
Special provisions for transport	The substance must not be transported by passengers (IATA). GRE 2012 Guide (CIQUIME): N° 133. Flammable Solid.
Environmental hazards	IATA: Not available IMDG/IMO: Not available ADN: Not available RID/ADR: Not available
UN Number	1350
UN Proper Shipping Name	Sulphur
Hazard class(es) for transportation	4.1
Packing Group	3
SECTION 15. REGULATORY INFORMATION	
Other Regulations	Mercosur Dangerous Goods Transportation Agreement [Acuerdo Sobre Transporte de Mercancías Peligrosas del Mercosur] National Health and Safety Law No. 19587/72 National Traffic Law No. 24,449 National Hazardous Waste Law No. 24,051 Regulatory Decree No. 351/79 on Health and Safety Resolution 195/97 Technical Standards Res. MTySS 295/03 Chemical Pollutants SRT Resolution No. 801/15 GHS SRT Resolution No. 3359/15, Extension GHS GHS - Globally Harmonized System of Classification and Labeling of Chemicals. 5th Ed. Revised. United Nations, New York and Geneva, 2013. TOMES Plus®, Vol 28, January 1996 Micomedex Inc.
SECTION 16. OTHER INFORMATION	
Glossary	<p>GHS: Globally Harmonized System. ACGIH: American Conference of Governmental Industrial Hygienists. (USA) ATHA WEEL: Workplace Environmental Exposure Level of the American Industrial Hygiene Association (USA) Carcinogenic: It is said of the physical, chemical or biological agent that induces the development of cancer. Teratogenic: That generates malformations to the fetus. CNRT: National Commission for Transport Regulation DL50: Mean Lethal Dose, CL50: Lethal Media Concentration. EC50: Concentration with effect in 50% of organisms. IARC: International Agency Research on Cancer</p> <p>Mutagenic: Substance or agent that permanently alters the DNA of cells. OECD: Organization for Cooperation and Development OSHA: Occupational Safety and Health Adm. (USA) Teratogenic: That generates malformations. PEL: Exposure Limit Allowed TLV: Threshold Limit Value TWA: Time weighted average. IATA: International Air Transport Association. IMDG: International Maritime Code of Dangerous Goods IMO: International Maritime Organization. DNA: European Agreement on the International Transport of Dangerous Goods in inland navigation. RID: Regulations for the International Transport of Dangerous Goods by Rail. ADR: "European Agreement on the International Carriage of Dangerous Goods by Road".</p>
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