

**AFEPASA**

AZUFRERA Y FERTILIZANTES PALLARES S.A.

**MATERIAL SAFETY DATA SHEET
RUBBER VULCANIZING AGENT HD OT20**

Date last revision: 6 March 2015

Version: 1

1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY

AZUFRERA Y FERTILIZANTES PALLARES, S.A. Avenida Europa 1 – 7 (Pol.Ind. Constanti) 43120 CONSTANTÍ – TARRAGONA - SPAIN TEL: + 34 977 524 650 FAX: + 34 977 524 651 www.afepasa.com	Product name: RUBBER VULCANIZING AGENT HD OT20			
	Chemical name: Mixture of insoluble sulphur and naphthenic oil			
	Synonyms: None			
Identified uses: Industrial (used as vulcanizing agent for tire industry)	Component	Molecular formula	CAS N°	EC(EINECS):
	Sulfur	S	7704-34-9	231-722-6
	Naphthenic oil	NP	64742-53-6	265-156-6

2. HAZARDS IDENTIFICATION

PHYSICAL/CHEMICAL	TOXICOLOGICAL (SYMPTOMS)
Non-flying yellow powder, very slight odour	Inhalation: Nuisance dust. May cause coughing, sneezing or labored breathing if large amounts are inhaled.
Keeping in cool, dry warehouse, to guarantee quality	Ingestion/Aspiration: Swallowing a relatively large amount of this material is unlikely to produce serious illness or death.
The product may cause an allergic skin reaction. Flammable, non-explosive	Skin contact: Causes mild skin irritation. Causes drying of the skin. May cause a rash and itching of the skin. Mild skin irritation (after prolonged and repeated contact), signs/symptoms can include redness, swelling and itching.
	Eye contact: May irritate eyes. Mild irritation: signs/symptoms can include redness, swelling, pain and tearing.
	General toxic effects: May cause skin and eye irritation

3. COMPOSITION / INFORMATION ABOUT THE COMPONENTS

General composition: Sulphur (80% ± 1%) and naphthenic oil (20% ± 1%)			
Dangerous components	Range %	Hazard class and category code(s)	Hazard statement code(s)
Sulphur	79-81	NP	NP
Naphthenic oil	19-21	R45	S53-45

4. FIRST-AID MEASURES

Inhalation: Supply fresh air. If required provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
Ingestion / aspiration: Consult doctor if symptoms persist.
On skin: Remove contaminated clothing and footwear. Wash with plenty of water and soap the affected areas for at least 15 minutes. Get medical attention if irritation persists.
In eyes: Wash with plenty of water for at least 15 minutes. Seek medical attention if irritation persists. DO NOT RUB EYES.
Notes to physician: No specific antidote. Treatment based on sound judgement of physician and individual reactions of patient.

5. FIRE-FIGHTING MEASURES

Extinguishing agents:	CO ₂ , dry chemicals, sand and water spray.
Non suitable extinguishing agents	NP.
Combustion products:	CO ₂ , SO ₂ .
Special measures:	Fight fire from a safe distance and from protected location. Flammable dust when in finely divided and highly suspended state. Do not allow runoff to enter waterways.
Special hazards:	Toxic emissions may result if product is involved in a fire. Fire produces toxic sulfur dioxide gas.
Protective equipment:	Independent respiration equipment. Heat resistant suits, gloves and protective glasses.



6. ACCIDENTAL SPILL MEASURES

Precautions for the environment Avoid spills to sewer and drains and dispersion of the product. The product is harmful to drinking water.	Personal precautions Avoid direct contact or inhalation of the product. Keep unnecessary people away. Ventilate closed spaces before entering
Clean-up methods: Solid spills are shovelled into closed plastic bags or containers for later recovery or disposal	Personal protection In presence of powdery product, use full-face protective mask with filter. In presence of vapours from hot product self-contained breathing apparatus is recommended. Wear goggles, and rubber overclothing, including gloves

7. HANDLING AND STORAGE

Handling General precautions: Prevent flames or sparks. Use protection gloves and glasses. Do not smoke, eat or drink while handling. Wash thoroughly with soap and water after handling. Specific conditions: Good local exhaust ventilation. Protective mask in presence of powdery product.

Storage Storage conditions: Store at room temperature. Cool and well ventilated place. Incompatible materials: Concentrated acids and alkali.
--

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protection gear: Respiratory Mask for respiratory protection, certified for pulverized products Ocular Security glasses or face-shield to avoid powdery product Cutaneous Impermeable gloves and appropriate clothing to avoid skin contact Skin and body Showers and eye-washers in working areas.
--

General precautions: Local exhaust ventilation. Avoid prolonged contact and/or inhalation.

Specific hygienic measures: Washing/showering facilities with a non-solvent based skin cleaner, hot water and soap must be provided and used. Overalls should be changed frequently and dry cleaned. Grossly contaminated clothing should be changed immediately. Use skin reconditioning cream after work.

Exposure controls: Engineering controls are not usually necessary if good hygiene practices are followed. Before eating, drinking or smoking, wash face and hands thoroughly with water and soap. Avoid unnecessary skin contact. Impervious gloves and apron are recommended to prevent skin contact. For operations where eye or face contact can occur, wear eye protection such as chemical splash-proof goggles or face shield. Where exposures are below the Permissible Exposure Limit, no respiratory protection is required. Where exposures exceeds the PEL, use respirator.
--

9. PHYSICAL AND CHEMICAL PROPERTIES

Aspect: Powder	pH (1% solution): Not Relevant
Colour: Yellow	Odour: Slight
Boiling point: 444° C (sulfur); Naphthenic oil: NP	Melting/Freezing point: 108°C (sulfur); naphthenic oil: NP
Flash point: 270°C(sulfur); Naphthenic oil: NP	Auto ignition temperature: 260° C (sulfur)
Explosive properties: NP	Oxidizing properties: NP
Surface tension: NP	Density : 1.58 g/cm ³
Vapour pressure: NP	Partition coefficient (n-octanol/water): NP
Water solubility: Insoluble	Solubility: Slightly soluble in organic solvents
Other data:	

**AFEPASA**

AZUFREIRA Y FERTILIZANTES PALLARES.S.A

10. STABILITY AND REACTIVITY

Stability: Stable at room temperature.	Conditions to avoid: Keep away from heat, sparks or flames. Avoid any source of ignition. Excessive heat. Contact with basic substances
Material to avoid: Avoid contact with acidic, basic or oxidizing agents. Do not expose to amines. Contact with copper. Non-protected steel. Avoid contamination of product with small amounts of water	
Risk of polymerization: Not Relevant	Hazardous decomposition/combustion products: Fire may produce sulfur dioxide gas and carbon dioxide

11. TOXICOLOGICAL INFORMATION

Routes of exposure: Mainly contact with skin, eyes and inhalation. Ingestion is not frequent
Carcinogenicity: NP
Reproductive toxicity: NP.
Medical conditions likely to be aggravated by exposure: NP

12. ECOLOGICAL INFORMATION

Pollutant potential:
Persistence and degradability: There are no data concerning the persistence and degradability of the product in natural systems.
Mobility/bioaccumulation: No data on the bioaccumulation for the product were found in literature. However, based on its insolubility in water it is not expected to appreciably bioconcentrate.
Ecotoxicological effects: Non-toxic to aquatic organisms.

13. DISPOSAL CONSIDERATIONS

Methods of disposal (surplus): Recycling and recovery of the material when possible
Waste: this product is not regarded as hazardous waste. Dispose in accordance with local legislation. Buy in a licensed landfill or burn in an approved incinerator according to local authorities.
<i>Disposal:</i> Dissolve or mix the material with combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.
<i>Handling:</i> Labelled and sealed containers.

14. TRANSPORT INFORMATION

Special precautions: Transport in well-sealed containers. Prevent physical disturbances and keep away from heat sources and from substances of a basic character.
Complementary information:
Name for transport: SULPHUR (solid)
Road –ADR /Railroad – RID / Maritime - IMO: Not dangerous
IATA: Substance not dangerous according to special disposition A105

15. REGULATORY INFORMATION

Classification: Skin Sens. 1
Hazard statements:
H350: May cause cancer
Precautionary statements:
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P332+P313: If skin irritation occurs: Get medical advice/attention.



16. OTHER INFORMATION

Hazard Class and Category shown in the document: Not relevant

Data bases consulted:

EINECS: European Inventory of Existing Commercial Substances.
HSDB: US National Library of Medicine.
TSCA: Toxic Substances Control Act, US Environmental Protection Agency
RTECS: US Department. of Health & Human Services

Regulations consulted:

Regulation CE no. 1907/2006 concerning registration, evaluation, authorization and restriction of chemical substances and preparations (REACH)
Dir. 67/548/CEE of hazardous substances (including corrections and adaptations in force).
Dir. 1999/45/CE of hazardous preparations (including corrections and adaptations in force).
Dir. 91/689/CEE of hazardous residues / Dir. 91/156/CEE of the management of residues
Royal Decree 363/95: Regulations on the notification of new substances and on classification, packaging and labelling of hazardous substances.
Royal Decree 255/2003: Regulations on classification, packaging and labelling of hazardous preparations.
European Agreement on International Transport of Dangerous Goods by Road (ADR).
Regulation concerning the International Transport of Dangerous Goods by Rail (RID).
International Maritime Dangerous Goods (IMDG).
Regulations of the International Air Transport Association (IATA) concerning the transport of Dangerous Goods by Air.

GLOSSARY:

CAS: Chemical Abstract Service	LD₅₀: Lethal Dose Average
IARC: International Agency for Research on Cancer	LC₅₀: Lethal Concentration Average
TDL₀: Toxic Dose Minimum	LDL₀: Lethal Dose Minimum
TLV: Threshold Level Value	BEI: Biological Exposure Index
TWA: Time Weighted Average	EC₅₀: Effective Concentration Average
STEL: Short Time Exposure Limit	IC₅₀: Inhibiting Concentration Average
REL: Reference Exposure Limit	BOD: Basic Oxygen Demand
PEL: Permissible Exposure Level	NA: Not Applicable
VLA: Environmental Value Level	Changes concerning the last revision: Update REACH regulation

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.