


Safety Data Sheet

Diamond Sulf OT 16

Section 1 - IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY	
1.1 Product identifier :	
<ul style="list-style-type: none"> • Product name : 	Diamond Sulf OT 16 (DS OT 16)
<ul style="list-style-type: none"> • Substance Name 	Sulfur, homopolymer Distillates (petroleum), hydrotreated heavy naphthenic Zinc Oxide
<ul style="list-style-type: none"> • EC# 	Distillates (petroleum), hydrotreated heavy naphthenic: 265-155-0 Zinc Oxide: 215-222-5
<ul style="list-style-type: none"> • CAS# 	Sulfur, homopolymer: 9035-99-8 Distillates (petroleum), hydrotreated heavy naphthenic: 64742-52-5 Zinc Oxide: 1314-13-2
<ul style="list-style-type: none"> • REACH Registration number 	Sulfur: 01-2119487295-27-0112 Distillates (petroleum), hydrotreated heavy naphthenic: 01-2119467170-45-0031 01-2119467170-45-0019 Zinc Oxide: 01-2119463881-32-0051
1.2 Relevant identified uses of the substances or mixture and used advised against :	
<ul style="list-style-type: none"> • Recommended use : 	Vulcanizing agent
<ul style="list-style-type: none"> • Recommended restrictions : 	None known
1.3 Details of supplier of the safety data sheet :	
<ul style="list-style-type: none"> • Manufacturer details : 	Oriental Carbon & Chemicals Limited SEZ Division : survey No 141, Paiki of Mouje Village Taluka Mundra, Mundra SEZ, District Kutch, Gujarat- 370421 India Telephone: +91-8980033912 / 13, +91-8980033926 / 63 Oriental Carbon & Chemicals Limited Plot No. 3 & 4, Industrial Estate,Phase-1 Dharuhera, Rewari Haryana, 123106, India Telephone: 91-1274-242109, 242250-51
<ul style="list-style-type: none"> • Only Representative details : 	REACHLaw Ltd. Vänrikinkuja 3 JK 21 FI-02600 Espoo Finland Tel: +358 (0) 9412 3055 Fax: +358-(0)9-412 3049 www.reachlaw.fi E-mail: duconfirmation@reachlaw.fi and registrations2@reachlaw.fi
1.4 Emergency Telephone :	
<ul style="list-style-type: none"> • Emergency telephone & contact : 	Mr. Sudeep Dasgupta Emergency telephone no: +91 120 2446850 / +91 8882577599 Email : sudeep@occlindia.com
Section 2 - HAZARDS IDENTIFICATION	

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2.1 Classification of substance or mixture according to Regulation (EC) No 1272/2008 (CLP) :					
Environmental hazard categories and codes:		Aquatic Acute		Category 2; H401	
		Aquatic Chronic		Category 2; H411	
2.2 Labeling according to Regulation (EC) No 1272/2008 (CLP) :					
Hazard Pictogram :		 <p style="text-align: center;">GHS09 Environment</p>			
Hazard Statements :		H411: Toxic to aquatic life with long-lasting effects.			
Precautionary Statements :		P273: Avoid release to the environment. P391: Collect spillage. P501: Dispose of contents/container in accordance with local/regional/national/international regulation.			
2.3 Other hazards :					
		Not known.			
Section 3 - COMPOSITION/INFORMATION ON INGREDIENTS					
Constituent	CAS No.	EC No.	Concentration range	Classification according to Regulation (EC) No 1272/2008 (CLP)	Remarks
Sulfur, homopolymer	9035-99-8	-	>=62.0% -63.0%	-	None
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	265-155-0	>= 16.0%-17.0%	Carcinogenic 1B; H350	* <u>Note L</u> is applicable.
Zinc Oxide	1314-13-2	215-222-5	>= 20.0% -21.0%	Aquatic acute 1; H400 Aquatic chronic 1; H410	None
<p>Note L: The classification as a carcinogen need not apply if it can be shown that the substance contains less than 1 mg/kg (0,0001 % by weight) BaP, or, less than 10 mg/kg (0,001 % by weight) of the sum of all listed PAHs (based on ANNEX XVII TO REACH – Conditions of restriction) as measured by the standard EN 16143:2013 (Petroleum products — Determination of content of Benzo(a)pyrene (BaP) and selected polycyclic aromatic hydrocarbons (PAH) in extender oils — Procedure using double LC cleaning and GC/MS analysis)</p> <p>Since the substance meets this criteria, it WILL NOT be classified as Carcinogen</p>					
Section 4 - FIRST AID MEASURES					
4.1 Description of First Aid measures :					
<ul style="list-style-type: none"> • General measures : 		In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing			
<ul style="list-style-type: none"> • Eye contact: 		Immediately flush the eyes with copious amounts of water for at least 10-15 minutes.			
<ul style="list-style-type: none"> • Skin Contact: 		Wash the affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.			
<ul style="list-style-type: none"> • Inhalation : 		Remove the victim to fresh air. If required get medical attention immediately.			
<ul style="list-style-type: none"> • Ingestion: 		If swallowed, induce vomiting immediately as directed by medical personnel. Get medical attention. Never give anything by mouth to an unconscious person.			

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4.2 Most important symptoms and effects, both acute and delayed :	
<ul style="list-style-type: none"> In all cases of doubt, or when symptoms persist, seek medical advice. 	
4.3 Indication of any immediate medical attention and special treatment needed :	
<ul style="list-style-type: none"> Advice to physician : Symptomatic treatment is advised. 	
Section 5 - FIRE-FIGHTING MEASURES	
5.1 Extinguishing media :	
<ul style="list-style-type: none"> Suitable extinguishing media : Use water, DCP & sand. Unsuitable extinguishing media : None known. 	
5.2 Special hazards arising from the substance or mixture :	
<ul style="list-style-type: none"> None known. 	
5.3 Advice for fire-fighters :	
<ul style="list-style-type: none"> Use full protective clothing and self-contained breathing apparatus. 	
Section 6 - ACCIDENTAL RELEASE MEASURES	
6.1 Personal precautions, protective equipment and emergency procedures :	
<ul style="list-style-type: none"> Advice for non-emergency personnel: 	Avoid contact with eyes and skin by use of protective equipment. Do not eat, drink, and smoke at working place. Always wash hands after handling. Wash contaminated clothing before re-using. Take care of proper disposal product.
<ul style="list-style-type: none"> Advice for emergency responders: 	Wear personal protective equipment (as mention in section 8.2.2). Ventilate the area. Evacuate personnel to safe areas.
6.2 Environmental precautions :	
<ul style="list-style-type: none"> Prevent leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided. Keep material in proper packing and ventilated storage. 	
6.3 Methods and material for containment and cleaning :	
<ul style="list-style-type: none"> Take up mechanically and collect in suitable container for disposal. Avoid raising dust. After cleaning, flush away traces with water authority requirements. Disposal into the drains must be avoided. 	
Section 7 - HANDLING AND STORAGE	
7.1 Precautions for safe handling :	
<ul style="list-style-type: none"> Advice on safe handling : 	Provide adequate ventilation in the area and prevent dust formation. Wear suitable protective clothing while using.

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<ul style="list-style-type: none">• Advice on hygiene :	Keep container closed. Promptly clean up spills. Do not ingest. Do not breathe dust.
<ul style="list-style-type: none">• Advice on protection against fire and explosion :	Keep away from sources of ignition. Refrain from smoking. Avoid static charge by friction or strike. Have proper earthing of the equipments which are used for handling this material
7.2 Conditions for safe storage :	
<ul style="list-style-type: none"> • Store the material in cool and dry place, have proper ventilation in the storage area. • Avoid exposure to sunlight. • Store the material away from acid, bases, oxidizing agents and amines. • Avoid to store together with foodstuffs and animal feedstock. 	
7.3 Specific end use(s) :	
As mention in section 1.2.	
Section 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION	
8.1 Control parameters:	
<ul style="list-style-type: none">• Exposure limits values:	DUST List of approved workplace exposure limits (WELs) / EH40 total respirable dust: TWA 10 mg/m ³ List of approved workplace exposure limits (WELs) / EH40 respirable dust: TWA 4 mg/m ³ Distillates (Petroleum) Hydro treated Heavy Naphthenic- OES*-TWA** 4.0mg/m ³ respirable dust Sulphur Homopolymer-OES*-TWA** None
8.2 Exposure control :	
8.2.1 Appropriate engineering controls :	
<ul style="list-style-type: none">• Engineering measures :	Handle in accordance with good industrial hygiene and safety practice. Use local exhaust ventilation if concentrations in air could exceed occupational exposure standard.
8.2.2 Individual protection measures :	
<ul style="list-style-type: none">• Respiratory Protection :	Use respiratory protection in case of insufficient exhaust ventilation or prolonged exposure.
<ul style="list-style-type: none">• Hand Protection :	Use suitable protective gloves as per the working condition details offered by various manufacturers.
<ul style="list-style-type: none">• Eye protection :	Wear tightly fitting safety goggles.
<ul style="list-style-type: none">• Skin protection :	Wear impervious clothing to prevent repeated or prolonged skin contact.
<ul style="list-style-type: none">• Hygiene measures :	Avoid contact with the skin and the eyes. When using, do not eat, drink or smoke. Wash hands before breaks and at the end of work day.
8.2.3 Environmental exposure controls :	
<ul style="list-style-type: none"> • Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. 	
Section 9 – PHYSICAL & CHEMICAL PROPERTIES	
9.1 Information on basic physical and chemical properties :	

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• Appearance :	Yellow Powder
• Odour :	Chrasteristic Odour
• Odour threshold :	Not Applicable
• pH :	Almost Neutral
• Melting point/Freezing point :	114 -120°C
• Initial boiling point& boiling range :	Not applicable as it is solid
• Flash point :	MORE THAN 156°C
• Evaporation rate :	Not at normal temperature
• Flammability :	No data available (Not classified as hazardous)
• Upper/lower flammability or explosive limits :	No data available
• Vapour pressure :	Less than 0.01 mBar @ 20°C
• Vapour density :	No data available
• Relative density :	1.4 – 1.8 (at 30°C)
• Solubility(ies) :	Insoluble in all common solvent
• Partition coefficient: n-octanol/water :	Not applicable as it is solid
• Auto-ignition temperature :	> 290°C
• Decomposition temperature :	No data available
• Viscosity :	Not applicable as it is solid
• Explosive properties :	Not classified
• Oxidizing properties :	Not classified
9.2 Other information : None	
Section 10 - STABILITY AND REACTIVITY	
• Reactivity :	No data available.
• Chemical stability :	Under normal conditions the product is stable.
• Possibility of hazardous reactions :	When handled and stored appropriately no dangerous reactions are known.
• Conditions to avoid :	Heat & ignition. Avoid release to the environment.
• Hazardous decomposition products :	ZnO & SO _x fumes can be generated during thermal processing.
• Incompatible materials :	Acids & Bases.
Section 11 - TOXICOLOGICAL INFORMATION	
• No data available.	
11.2 Irritation /corrosion :	
• Eye: Non-irritating.	

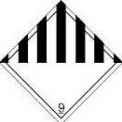
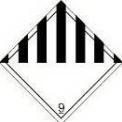
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<ul style="list-style-type: none"> • Skin: Non-irritating. 	
11.3 Sensitization :	
<ul style="list-style-type: none"> • Skin: Not expected to be sensitizing. 	
11.4 CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) :	
<ul style="list-style-type: none"> • Carcinogenicity: 	Not classified as carcinogen.
<ul style="list-style-type: none"> • Mutagenic effects : 	Not classified as a mutagen.
<ul style="list-style-type: none"> • Reprotoxic effects: 	Not found to be reprotoxic.
11.5 Other toxic effects on humans :	
<ul style="list-style-type: none"> • Inhalation: 	No data available.
<ul style="list-style-type: none"> • Eyes: 	Dust contact with the eyes can lead to mechanical irritation.
<ul style="list-style-type: none"> • Ingestion: 	May cause irritation of the gastrointestinal tract.
<ul style="list-style-type: none"> • Chronic toxicity: 	No data available.
11.6 Specific target organ toxicity :	
<ul style="list-style-type: none"> • Single exposure: 	No experimental or epidemiological sufficient evidence for specific target organ toxicity.
<ul style="list-style-type: none"> • Repeated exposure: 	No experimental or epidemiological sufficient evidence for specific target organ toxicity.
11.7 Aspiration hazard : No data available.	
Section 12 - ECOLOGICAL INFORMATION	
12.1 Ecotoxicity :	
<ul style="list-style-type: none"> • Please find below table where we provided Zinc oxide toxicity data that listed as hazardous under section 3. Also note that this components found in final product in less quantity so final product doesn't exhibit same hazardous properties that reported here. 	
Toxicity type	Zinc oxide
Toxicity to fish	Effect level:LC50 - 0.927-2.589 mg/l Time scale: 96h Species: Danio rerio Classify as Aquatic acute toxicity Category I from its LC50 value.
Toxicity to Invertebrates	Effect level:LC50 - 0.78-0.94 mg/l Time scale: 96h Species: Aquatic crustacea Classify as Aquatic acute toxicity Category I from its LC50 value.
Toxicity to aquatic plants other than algae	Effect level: NOEC - > 10 - < 50 mg/L Time scale: 96h Species: Spirodela polyrhiza Classify as Aquatic acute toxicity Category I from its NOEC value.
12.2 Persistence and degradability :	

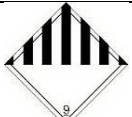
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<ul style="list-style-type: none"> Information not available for final product. 	
12.3 Bioaccumulative potential :	
<ul style="list-style-type: none"> Information not available for final product. 	
12.4 Mobility in soil :	
<ul style="list-style-type: none"> Information not available for final product. 	
12.5 Results of PBT and vPvB assessment :	
<ul style="list-style-type: none"> Information not available for final product. 	
12.6 Other adverse effects :	
<ul style="list-style-type: none"> None known. 	
Section 13 - DISPOSAL CONSIDERATIONS	
<ul style="list-style-type: none"> Disposal of product : 	Dispose of as hazardous waste. Recover or recycle if possible. Otherwise incineration. Dispose of in accordance with all local regulations.
<ul style="list-style-type: none"> Disposal of packaging : 	Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse. Packaging that cannot be cleaned should be disposed of in agreement with the regional waste disposal company.
Section 14 - TRANSPORT INFORMATION	
Classified as dangerous in the meaning of transport regulations due to its composition.	
Land transport (ADR/RID)	
<ul style="list-style-type: none"> UN Number: 	3077
<ul style="list-style-type: none"> UN proper shipping name: 	Environmentally Hazardous Substances, Solid, N.O.S. (Zinc oxide)
<ul style="list-style-type: none"> Transport hazard class: 	 Class 9
<ul style="list-style-type: none"> Packing group: 	III
Air transport ICAO/IATA	
<ul style="list-style-type: none"> UN Number: 	3077
<ul style="list-style-type: none"> UN proper shipping name: 	Environmentally Hazardous Substances, Solid, N.O.S. (Zinc oxide)
<ul style="list-style-type: none"> Transport hazard class: 	 Class 9
<ul style="list-style-type: none"> Packing group: 	III
Marine transport (IMDG)	
<ul style="list-style-type: none"> UN Number: 	3077

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• UN proper shipping name:	Environmentally Hazardous Substances, Solid, N.O.S. (Zinc oxide)
• Transport hazard class:	 Class 9
• Packing group:	III
• EmS number :	F-A, S-F
• Marine pollutant :	Yes(zinc oxide)

Section 15 - REGULATORY INFORMATION

15.1 Other Regulatory information :

- This safety datasheet complies with the requirements of Regulation (EU) No. 453/2010.
- **Safety, health and environmental regulations/legislation specific for the substance or mixture :**
No data available.
- **Inventory Status :**
Components of mixture listed in: US (TSCA), Europe (EINECS), New Zealand (NZIoC), Philippines (PICCS), Canada (DSL), China (IECSC), Australia (AICS).

- **HMS (Hazardous Materials Identification System) classification:**

Health	0
Fire	0
Physical Hazard	0
Personal Protection	C

0 = No significant risk to health.

0 = Materials that will not burn.

0 = Materials that are normally stable, under fire conditions and will not react to water, polymerize, decompose, condense or self-react.




C = Safety Glasses + Gloves + Protective Apron

- **NFPA (National Fire Protection Association) classification:**

Health	0
Fire	0
Reactivity	0

0 = Poses no health hazard, no precautions necessary and would offer no hazard beyond that of ordinary combustible materials

0 = Materials that will not burn under typical fire conditions.

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	0 = Normally stable.	
15.2 Chemical Safety Assessment:		
<ul style="list-style-type: none"> • A chemical safety assessment has been carried out for the substance or the mixture by the supplier (LR) - No 		
Section 16 – OTHER INFORMATION		
16.1 Technical Advice:		
<ul style="list-style-type: none"> • Use data given in this Safety Data Sheet and make an inventory list of all chemicals used in the factory; • Create a Register for Workplace Chemicals; • Set priorities concerning the safety in the organization; • Create emergency plans for the assessed hazards; • Organize occupational health care and regular surveys as necessary; • Organize contacts with authorities/laboratories to create a monitoring system for chemical hazards, and to reliably measure and/or estimate occupational exposures to chemicals when needed; • Start collecting case studies of accidents and sickness records in the enterprise to create a basis for priority measures in the control of hazards; • Involve workers in safety organizations, such as the system of Safety Representatives and Committees; • Do regular inspection using checklists made for the particular chemicals and chemical processes in use; • Mark and label all chemicals; • Keep at hand an inventory list of all chemicals handled in the place of work together with a collection of Chemical Safety Data Sheets for these chemicals; • Train workers to read and understand the Chemical Safety Information, including the health hazards and routes of exposure; train them to handle dangerous chemicals and processes with respect; • Plan, develop and choose the safe working procedures; • Reduce the number of people coming into contact with dangerous chemicals; • Reduce the length of time and/or frequency of exposure of workers to dangerous chemicals; • Train workers to know and understand the emergency procedures; • Equip and train workers to use personal protective equipment properly after everything possible has been done to eliminate hazards by means of other methods; 		
16.2 List of relevant R phrases:		
R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment		