

**Sulfur Control Type F**

Version 2.4

Revision Date 2016-01-15

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****Product information**

Product Name : Sulfur Control Type F  
Material : 1096737

Use : Chemical intermediate

**Company** : Chevron Phillips Chemical Company LP  
10001 Six Pines Drive  
The Woodlands, TX 77380

**Emergency telephone:****Health:**

866.442.9628 (North America)

1.832.813.4984 (International)

**Transport:**

CHEMTREC 800.424.9300 or 703.527.3887(int'l)

Asia: +800 CHEMCALL (+800 2436 2255) China: +86-21-22157316

EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600

Responsible Department : Product Safety and Toxicology Group  
E-mail address : SDS@CPChem.com  
Website : www.CPChem.com

**SECTION 2: Hazards identification****Classification of the substance or mixture**

This product has been classified in accordance with the hazard communication standard 29 CFR 1910.1200; the SDS and labels contain all the information as required by the standard.

**Emergency Overview**

**Form:** free flowing wettable powder, wettable powder    **Physical state:** Solid    **Color:** White, off-white    **Odor:** Odorless

**Classification**

:

Not a hazardous substance or mixture.

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**Labeling**

Not a hazardous substance or mixture.

**Potential Health Effects**

Physical Hazards : Mechanical processing may form combustible dust concentrations in air and thermal processing at elevated temperatures may generate simple hydrocarbons and carbon oxides.

**Carcinogenicity:**

**IARC** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**ACGIH** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**SECTION 3: Composition/information on ingredients**

Synonyms : Catalyst F  
CPChem Sulfur Control F

Molecular formula : Mixture

Component	CAS-No.	Weight %
Alumina Oxide	1344-28-1	96
Aluminum chloride hydroxide	12042-91-0	1 - 5
Platinum	7440-06-4	2

**SECTION 4: First aid measures**

General advice : Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Material may produce a serious, potentially fatal pneumonia if swallowed or vomited.

If inhaled : Call a physician or poison control center immediately. If unconscious place in recovery position and seek medical advice.

In case of skin contact : If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.

In case of eye contact : Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear. Never give anything by mouth to

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an unconscious person. If symptoms persist, call a physician.  
Take victim immediately to hospital.

**SECTION 5: Firefighting measures**

Flash point	: Not applicable
Autoignition temperature	: Not applicable
Unsuitable extinguishing media	: High volume water jet.
Specific hazards during fire fighting	: Risks of ignition followed by flame propagation or secondary explosions can be caused by the accumulation of dust, e.g. on floors and ledges.
Special protective equipment for fire-fighters	: Wear self-contained breathing apparatus for firefighting if necessary.
Further information	: Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Fire and explosion protection	: Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed.
Hazardous decomposition products	: Chlorine.

**SECTION 6: Accidental release measures**

Personal precautions	: Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas.
Environmental precautions	: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods for cleaning up	: Keep in suitable, closed containers for disposal.
Additional advice	: Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).

**SECTION 7: Handling and storage****Handling**

Advice on safe handling	: Avoid formation of respirable particles. Do not breathe vapors/dust. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should
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be prohibited in the application area. Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed.

**Storage**

Requirements for storage areas and containers : Prevent unauthorized access. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the technological safety standards.

**SECTION 8: Exposure controls/personal protection****Ingredients with workplace control parameters****US**

Ingredients	Basis	Value	Control parameters	Note
Alumina Oxide	OSHA Z-1-A	TWA	10 mg/m3	Total
	OSHA Z-1-A	TWA	5 mg/m3	Respirable fraction
	ACGIH	TWA	1 mg/m3	A4, varies, Respirable fraction
	OSHA Z-1	TWA	15 mg/m3	total dust
Aluminum chloride hydroxide	OSHA Z-1	TWA	5 mg/m3	respirable fraction
	OSHA Z-1-A	TWA	2 mg/m3	
Platinum	ACGIH	TWA	1 mg/m3	
	OSHA Z-1-A	TWA	1 mg/m3	

A4 Not classifiable as a human carcinogen  
varies varies

**Engineering measures**

Adequate ventilation to control airborne concentrations below the exposure guidelines/limits. Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

**Personal protective equipment**

Respiratory protection : Wear a supplied-air NIOSH approved respirator unless ventilation or other engineering controls are adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure. Wear a NIOSH approved respirator that provides protection when working with this material if exposure to harmful levels of airborne material may occur, such as: Full-Face Supplied-Air Respirator. Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate protection.

Hand protection : The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into

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consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

- Eye protection : Eye wash bottle with pure water. Safety glasses.
- Skin and body protection : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Wear as appropriate:. Protective suit. Safety shoes.
- Hygiene measures : When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

**SECTION 9: Physical and chemical properties****Information on basic physical and chemical properties****Appearance**

- Form : free flowing wettable powder, wettable powder
- Physical state : Solid
- Color : White, off-white
- Odor : Odorless
- Odor Threshold : No data available

**Safety data**

- Flash point : Not applicable
- Lower explosion limit : Not applicable
- Upper explosion limit : Not applicable
- Oxidizing properties : No
- Autoignition temperature : Not applicable
- Molecular formula : Mixture
- Molecular weight : Not applicable
- pH : Not applicable
- Pour point : No data available
- Boiling point/boiling range : Not applicable
- Vapor pressure : Not applicable
- Relative density : 0.7 - 1.3  
at 0 °C (32 °F)
- Water solubility : Insoluble
- Partition coefficient: n- : No data available

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octanol/water  
Viscosity, kinematic : Not applicable

Relative vapor density : Not applicable

Evaporation rate : No data available

Dust deflagration index Kst : > 0.0 m.b./s

**SECTION 10: Stability and reactivity**

Chemical stability : This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Possibility of hazardous reactions**

Conditions to avoid : No data available.

Hazardous decomposition products : Chlorine

Other data : No decomposition if stored and applied as directed.

**SECTION 11: Toxicological information****Sulfur Control Type F**

**Acute oral toxicity** : Presumed Not Toxic  
Information refers to the main ingredient.

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**Acute inhalation toxicity** : LC50: unknown

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**Acute dermal toxicity** : Presumed Not Toxic  
Information refers to the main ingredient.

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**Skin irritation** : May cause skin irritation in susceptible persons.

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**Eye irritation** : May irritate eyes.

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**Sensitization** : No data available.

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**Aspiration toxicity** : No aspiration toxicity classification.

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**Further information** : No data available.

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**SECTION 12: Ecological information****Ecotoxicity effects****Toxicity to fish** : No data available**Toxicity to daphnia and other aquatic invertebrates** : No data available**Toxicity to algae**

Alumina Oxide : NOEC: > 100 mg/l  
Exposure time: 72 h  
Species: Selenastrum capricornutum (algae)  
Method: OECD Test Guideline 201

Elimination information (persistence and degradability)

Biodegradability : Not applicable

**Ecotoxicology Assessment**

Additional ecological information : No data available

**SECTION 13: Disposal considerations**

The information in this SDS pertains only to the product as shipped.

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

**Product** : Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.

**Contaminated packaging** : Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.

**SECTION 14: Transport information**

**The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).**

Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.) Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the SDS and the bill of lading.

**US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION)**

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NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

**IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)**

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

**IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)**

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

**ADR (AGREEMENT ON DANGEROUS GOODS BY ROAD (EUROPE))**

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

**RID (REGULATIONS CONCERNING THE INTERNATIONAL TRANSPORT OF DANGEROUS GOODS (EUROPE))**

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

**ADN (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS)**

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

**SECTION 15: Regulatory information****National legislation**

**SARA 311/312 Hazards** : No SARA Hazards

**CERCLA Reportable Quantity** : This material does not contain any components with a CERCLA RQ.

**SARA 302 Reportable Quantity** : This material does not contain any components with a SARA 302 RQ.

**SARA 302 Threshold Planning Quantity** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 304 Reportable Quantity** : This material does not contain any components with a section 304 EHS RQ.



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SARA 313 Ingredients : The following components are subject to reporting levels established by SARA Title III, Section 313:

: Alumina Oxide - 1344-28-1

**Clean Air Act**

Ozone-Depletion Potential : This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

**US State Regulations****Pennsylvania Right To Know**

: Alumina Oxide - 1344-28-1  
Platinum - 7440-06-4  
Aluminum chloride hydroxide - 12042-91-0

**New Jersey Right To Know**

: Alumina Oxide - 1344-28-1  
Platinum - 7440-06-4

**California Prop. 65  
Ingredients**

: This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

**Notification status****Europe REACH**

: A substance or substances in this product is not registered or notified to be registered. Importation or manufacture of this product is still permitted provided that it does not exceed the REACH minimum threshold quantity of the non-regulated substances.

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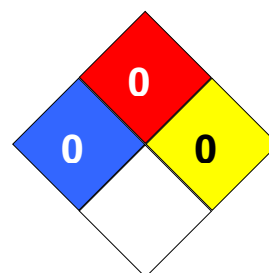
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United States of America TSCA	:	On TSCA Inventory
Canada DSL	:	All components of this product are on the Canadian DSL
Australia AICS	:	On the inventory, or in compliance with the inventory
New Zealand NZIoC	:	On the inventory, or in compliance with the inventory
Japan ENCS	:	Not in compliance with the inventory
Korea KECI	:	On the inventory, or in compliance with the inventory
Philippines PICCS	:	On the inventory, or in compliance with the inventory
China IECSC	:	On the inventory, or in compliance with the inventory

**SECTION 16: Other information**

**NFPA Classification** : Health Hazard: 0  
Fire Hazard: 0  
Reactivity Hazard: 0

**Further information**

Legacy SDS Number : 3517

Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information in this SDS pertains only to the product as shipped.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**Key or legend to abbreviations and acronyms used in the safety data sheet**

ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing	PICCS	Philippines Inventory of

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	Chemical Substances		Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50	Lethal Concentration 50%		