

Version 1.4 Revision Date 2022-07-14

according to GB/T 16483 and GB/T 17519

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

Product information

Product Name : Dimethyl Sulfide

Material : 1127778, 1108785, 1073702, 1073703, 1073704, 1103885,

1073705, 1077804, 1089246, 1101535, 1098710, 1084190, 1028766, 1024530, 1024531, 1024532, 1024533, 1024534,

1024535, 1024536

Use : Intermediate

Company : Chevron Phillips Chemical Company LP

Specialty Chemicals 10001 Six Pines Drive The Woodlands, TX 77380

Local : Chevron Phillips Chemicals (Shanghai) Corporation

Room 1810-1812, Shanghai Mart,

2299 Yan An Road (W), Shanghai, PRC 200336 Tel: (86-21) 22157200

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: CHEMWATCH (+612 9186 1132) China: 0532 8388 9090

Mexico CHEMTREC 01-800-681-9531 (24 hours)

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

Argentina: +(54)-1159839431

EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax) Austria: VIZ +43 1 406 43 43 (24 hours/day, 7 days/week)

Belgium: 070 245 245 (24 hours/day, 7 days/week)

Bulgaria: +359 2 9154 233

Croatia: +3851 2348 342 (24 hours/day, 7 days/week)

Cyprus: 1401

Czech Republic: Toxicological Information Center +420 224 919 293, +420 224 915 402

Denmark: Danish Poison Center (Giftlinjen): +45 8212 1212 Estonia: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

SDS Number:100000013358 1/13

Version 1.4 Revision Date 2022-07-14

Finland: 0800 147 111 09 471 977 (24 hours/day)

France: ORFILA number (INRS): + 33 (0) 1 45 42 59 59 (24 hours/day, 7 days/week)

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

Greece: (0030) 2107793777 (24 hours/day, 7 days/week) Hungary: +36-80-201-199 (24 hours/day, 7 days/week)

Iceland: 543 2222 (24 hours/day, 7 days/week)

Ireland: BIG +32.14.584545 (phone) or +32.14583516 (telefax) Italy: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Latvia: State Fire and Rescue Service, phone number: 112; Toxicology and Sepsis Clinic

Poisoning and Drug Information Center, Hipokrāta 2, Riga, Latvia, LV-1038, phone number +371

67042473. (24 hours.)

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

Lithuania: +370 (85) 2362052

Luxembourg: (+352) 8002 5500 (24 hours/day, 7 days/week)

Malta: +356 2395 2000

The Netherlands: NVIC: +31 (0)88 755 8000 Norway: 22 59 13 00 (24 hours/day, 7 days/week)

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

Portugal: CIAV phone number: +351 800 250 250

Romania: +40213183606 Slovakia: +421 2 5477 4166 Slovenia: Phone number: 112

Spain: National Emergency Telephone Number of Spanish Poison Centre: +34 91 562 04 20 (24

hours/day, 7 days/week)

Sweden: 112 – ask for Poisons Information

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

GHS Classification and Labeling: Follow GB 13690, GB 15258 and GB 30000.2 to GB 30000.29 (GHS 2011)

Emergency Overview

Danger

Form: liquid Physical state: liquid Color: Clear Odor: Repulsive

Hazards : Highly flammable liquid and vapor. Causes eye irritation. May

be harmful if swallowed and enters airways. Harmful to aquatic

life.

Classification

: Flammable liquids, Category 2

Serious eye damage/eye irritation, Category 2B

Aspiration hazard, Category 2

Short-term (acute) aquatic hazard, Category 3

Labeling

SDS Number:100000013358 2/13

Dimethyl Sulfide

Version 1.4 Revision Date 2022-07-14

Symbol(s)





Signal Word : Danger

Hazard Statements : H225: Highly flammable liquid and vapor.

H305: May be harmful if swallowed and enters airways.

H320: Causes eye irritation. H402: Harmful to aquatic life.

Precautionary Statements : **Prevention**:

P210: Keep away from heat/ sparks/ open flames/ hot

surfaces. No smoking.

P233: Keep container tightly closed.

P240: Ground/bond container and receiving equipment.
P241: Use explosion-proof electrical/ ventilating/ lighting/

equipment.

P242: Use only non-sparking tools.

P243: Take precautionary measures against static discharge.

P264: Wash skin thoroughly after handling. P273: Avoid release to the environment.

P280: Wear protective gloves/ eye protection/ face protection.

Response:

P301+P310: IF SWALLOWED: Immediately call a POISON

CENTER/doctor.

P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/

shower.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. P331: Do NOT induce vomiting.

P337 + P313: If eye irritation persists: Get medical advice/

attention.

P370+P378: In case of fire: Use dry sand, dry chemical or

alcohol-resistant foam to extinguish.

Storage:

P403 + P235: Store in a well-ventilated place. Keep cool.

Disposal:

P501: Dispose of contents/ container to an approved waste

disposal plant.

SECTION 3: Composition/information on ingredients

Synonyms : Dimethyl Sulfide Pure

Methyl sulfide

DMS

Di-Methyl Sulfide

Molecular formula : C2H6S

SDS Number:100000013358 3/13

Version 1.4 Revision Date 2022-07-14

Chemical name	CAS-No. / EINECS-No.	Concentration [wt%]
Dimethyl Sulfide	75-18-3	99 - 100

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 : If unconscious, place in recovery position and seek medical

advice. If symptoms persist, call a physician.

In case of skin contact : If on skin, rinse well with water. If on clothes, remove clothes.

In case of eye contact : Flush eyes with water as a precaution. 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

an unconscious person. If symptoms persist, call a physician.

Take victim immediately to hospital.

SECTION 5: Firefighting measures

Flash point : -37°C (-35°F)

estimated

Autoignition temperature : 220°C (428°F)

Suitable extinguishing

media

: Alcohol-resistant foam. Carbon dioxide (CO2). Dry chemical.

Unsuitable extinguishing

media

High volume water jet.

Specific hazards during fire

fighting

: Do not allow run-off from fire fighting to enter drains or water

courses.

Special protective equipment for fire-fighters

: Wear self-contained breathing apparatus for firefighting if

necessary.

Further information : Collect contaminated fire extinguishing water separately. This

must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, caps should be stored separately in closed.

of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed

containers.

Fire and explosion

protection

: Do not spray on a naked flame or any incandescent material.

Take necessary action to avoid static electricity discharge

(which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot

surfaces and sources of ignition.

SDS Number:100000013358 4/13

Version 1.4 Revision Date 2022-07-14

Hazardous decomposition

products

: Carbon oxides. Sulfur oxides.

SECTION 6: Accidental release measures

Personal precautions : Use personal protective equipment. Ensure adequate

ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low

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 : Contain spillage, and then collect with non-combustible

absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to

local / national regulations (see section 13).

SECTION 7: Handling and storage

Handling

Advice on safe handling : Avoid formation of aerosol. Do not breathe vapors/dust. For

personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion

Do not spray on a naked flame or any incandescent material.

Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot

surfaces and sources of ignition.

Storage

Requirements for storage areas and containers

: No smoking. 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. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

Use : Intermediate

SECTION 8: Exposure controls/personal protection

Not applicable

Engineering measures

Adequate ventilation to control airborned concentrations below the exposure guidelines/limits.

SDS Number:100000013358 5/13

Version 1.4 Revision Date 2022-07-14

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:. Air-Purifying Respirator for Organic Vapors. Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, aerosolization, 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 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. Tightly fitting safety goggles.

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:. Flame retardant antistatic protective clothing. Workers should wear antistatic

footwear.

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 : liquid
Physical state : liquid
Color : Clear
Odor : Repulsive

Safety data

Flash point : -37°C (-35°F)

estimated

Lower explosion limit : 2.2 %(V)

SDS Number:100000013358 6/13

Dimethyl Sulfide

Version 1.4 Revision Date 2022-07-14

Upper explosion limit : 19.7 %(V)

Oxidizing properties : yes

Autoignition temperature : 220°C (428°F)

Molecular formula : C2H6S

Molecular weight : 62.14 g/mol

pH : Not applicable

Pour point : No data available

Boiling point/boiling range : 37°C (99°F)

Vapor pressure : 15.00 PSI

at 38°C (100°F)

Relative density : 0.85

at 15.6 °C (60.1 °F)

Water solubility : 7,280 MG/L

at 20°C (68°F)

Partition coefficient: n-

octanol/water

: log Pow: 0.84 at 20°C (68°F)

Solubility in other solvents : Medium: Water slightly soluble

oligitary oblabile

Viscosity, kinematic : 0.285 cSt

at 20°C (68°F)

Relative vapor density : 2.1

(Air = 1.0)

Evaporation rate : No data available

Percent volatile : > 99 %

SECTION 10: Stability and reactivity

Reactivity : Stable under recommended storage conditions.

Chemical stability : This material is considered stable under normal ambient and

anticipated storage and handling conditions of temperature

and pressure.

Possibility of hazardous reactions

SDS Number:100000013358 7/13

Dimethyl Sulfide

Version 1.4 Revision Date 2022-07-14

Hazardous reactions : Hazardous polymerization does not

occur.

Hazardous reactions: Vapors may form explosive mixture with

air.

Conditions to avoid : Heat, flames and sparks.

Materials to avoid : May react with oxygen and strong oxidizing agents, such as

chlorates, nitrates, peroxides, etc.

Hazardous decomposition

products

: Carbon oxides Sulfur oxides

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

SECTION 11: Toxicological information

Acute oral toxicity

Dimethyl Sulfide : LD50: > 2,000 mg/kg

Species: Rat

Method: OECD Test Guideline 423

Acute inhalation toxicity

Dimethyl Sulfide : LC50: 102 mg/l

Exposure time: 4 h Species: Rat

Sex: male and female Test atmosphere: vapor

Method: OECD Test Guideline 403

Acute dermal toxicity

Dimethyl Sulfide : LD50: > 2,000 mg/kg

Method: OECD Test Guideline 402

Skin irritation

Dimethyl Sulfide : No skin irritation

Eye irritation

Dimethyl Sulfide : May irritate eyes.

Sensitization

Dimethyl Sulfide : Did not cause sensitization on laboratory animals.

Repeated dose toxicity

Dimethyl Sulfide : Species: Rat, Male and female

Sex: Male and female Application Route: Oral diet

SDS Number:100000013358 8/13

Version 1.4 Revision Date 2022-07-14

Dose: 0, 2.5, 25, 250 mg/kg bw/day

Exposure time: 14 wk Number of exposures: daily NOEL: 250 mg/kg

Method: OECD Test Guideline 408 No adverse effects expected

Species: Rat, Male and female

Sex: Male and female

Application Route: inhalation (vapor) Dose: 0, 0.310, 0.964, 2.783 mg/l Exposure time: 13 wk (6 h) Number of exposures: 7 d/wk

NOEL: 2.783 mg/l

Method: OECD Guideline 413

Information given is based on data obtained from similar

substances.

Genotoxicity in vitro

Dimethyl Sulfide : Test Type: Ames test

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Test Type: Mouse lymphoma assay

Metabolic activation: with and without metabolic activation

Method: OECD Guideline 476

Result: negative

Genotoxicity in vivo

Dimethyl Sulfide : Test Type: In vivo micronucleus test

Species: Mouse

Cell type: Bone marrow Route of Application: Oral Dose: 1250, 2500, 5000 mg/kg Method: OECD Test Guideline 474

Result: negative

Developmental Toxicity

Dimethyl Sulfide : Species: Rat

Application Route: oral gavage Dose: 100, 500, 1000 mg/kg Exposure time: GD 6 - 19 Number of exposures: daily

Test period: 20 d

Method: OECD Guideline 414 NOAEL Teratogenicity: 1,000 mg/kg NOAEL Maternal: 1,000 mg/kg

Dimethyl Sulfide

Aspiration toxicity : May be harmful if swallowed and enters airways.

CMR effects

Dimethyl Sulfide : Carcinogenicity: Not available

SDS Number:100000013358 9/13

Dimethyl Sulfide

Version 1.4 Revision Date 2022-07-14

Mutagenicity: Tests on bacterial or mammalian cell cultures did not show mutagenic effects., In vivo tests did not show

mutagenic effects

Reproductive toxicity: No evidence of adverse effects on sexual function and fertility, or on development, based on

animal experiments.

Dimethyl Sulfide

Further information : Solvents may degrease the skin.

SECTION 12: Ecological information

Toxicity to fish

Dimethyl Sulfide : LC50: 213 mg/l

Exposure time: 96 h

Species: Oncorhynchus mykiss (rainbow trout)

Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates

Dimethyl Sulfide : EC50: 29 mg/l

Exposure time: 48 h

Species: Daphnia magna (Water flea) static test Method: OECD Test Guideline 202

Toxicity to algae

Dimethyl Sulfide : IC50: > 113.7 mg/l

Exposure time: 72 h

Species: Selenastrum capricornutum (algae)

Method: OECD Test Guideline 201

Biodegradability

Dimethyl Sulfide : aerobic

Result: Readily biodegradable.

77 %

Method: OECD Test Guideline 301

Bioaccumulation

Dimethyl Sulfide : No bioaccumulation is to be expected (log Pow <= 4).

Mobility

Dimethyl Sulfide : Method: Calculation, Mackay Level III Fugacity Model

The product will be dispersed amongst the various environmental compartments (soil/ water/ air).

SDS Number:100000013358 10/13

Version 1.4 Revision Date 2022-07-14

Results of PBT assessment

Dimethyl Sulfide : Non-classified PBT substance, Non-classified vPvB substance

Additional ecological

information

: Harmful to aquatic life.

Ecotoxicology Assessment

Short-term (acute) aquatic hazard

Dimethyl Sulfide : Harmful to aquatic life.

Long-term (chronic) aquatic hazard

Dimethyl Sulfide : This material is not expected to be harmful to aquatic

organisms.

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 : The product should not be allowed to enter drains, water

courses or the soil. 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. Do not burn, or use a cutting

torch on, the empty drum.

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)

UN1164, DIMETHYL SULFIDE, 3, II

IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)

UN1164, DIMETHYL SULPHIDE, 3, II, (-37 °C c.c.)

IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)

UN1164, DIMETHYL SULPHIDE, 3, II

SDS Number:100000013358 11/13

Version 1.4 Revision Date 2022-07-14

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

UN1164, DIMETHYL SULPHIDE, 3, II, (D/E)

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

33, UN1164, DIMETHYL SULPHIDE, 3, II

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

UN1164, DIMETHYL SULPHIDE, 3, II

Maritime transport in bulk according to IMO instruments

SECTION 15: Regulatory information

Classification and Labeling of

Commonly Used Dangerous Chemical Substances

: Primary label: Combustible Liquid.

Notification status

Europe REACH : This product is in full compliance according to REACH

regulation 1907/2006/EC.

Switzerland CH INV : On the inventory, or in compliance with the inventory

United States of America (USA) : On or in compliance with the active portion of the

TSCA TSCA inventory

Other AIIC : On the inventory, or in compliance with the inventory

New Zealand NZIoC : On the inventory, or in compliance with the inventory Japan ENCS : On the inventory, or in compliance with the inventory Korea KECI : A substance(s) in this product was not registered.

A substance(s) in this product was not registered, notified to be registered, or exempted from registration by CPChem according to K-REACH regulations.

Importation or manufacture of this product is still permitted provided the Korean Importer of Record has themselves notified the substance or the exported amount does not exceed the minimum threshold

quantity of the non-registered substance(s).

Philippines PICCS : On the inventory, or in compliance with the inventory Taiwan TCSI : On the inventory, or in compliance with the inventory China IECSC : On the inventory, or in compliance with the inventory

Other regulations : Law on the Prevention and Control of Occupational

Diseases

SDS Number:100000013358 12/13

Dimethyl Sulfide

Version 1.4 Revision Date 2022-07-14

SECTION 16: Other information

Further information

Legacy SDS Number : 61250

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.

	ey or legend to abbreviations and a	cronyms used	d 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 Chemical Substances	PICCS	Philippines Inventory of 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%		

SDS Number:100000013358 13/13