## **DIMETHYL SULFIDE**

Plasts and mixes slowly with water. Irritating vapor is produced. Boiling point is 99°F. Plast and mixes slowly with water. Irritating vapor is produced. Boiling point is 99°F. Plast and mixes slowly with water. Irritating vapor is produced. Boiling point is 99°F. Plast and mixes slowly with water. Plast and slow mixes and slow water. Plast and slow mixes and slow water. Plast and slow mixes and slow with plenty of water. Plast and mixes with plenty of water. Plast and slow water indexes. Network water water indexes. N	Common Sime	nyme	Liquid Colorless to light vallow Lippless at a day					
Avoid inhabiton.'         Shord infaitions outces. Call fie departmet.         Evacuate area in case of large discharge.         Note: value index of large discharge.         Price       F.M.M.B.E.         Fire       P.M.M.B.E.         Price       P.M.M.B.E.         Stable of large discharge.       Note: value index.         Value of large discharge.       Note: value of large discharge.         Value of large discharge.       Note: value of large discharge.         Value of large discharge.       Note: value of large discharge.         Value of large discharge.       Note: value of large discharge.         Value of large discharge.       Note: value of large discharge.         Value of large discharge.       Note: value of large discharge.         Value of large discharge.       Note: value of large discharge.         Value of large discharge.       Note: value of large discharge.         Value of large discharge	MS lethanethiomethane lethyl sulfide		Liquid Colorless to light yellow Unpleasant odor Floats and mixes slowly with water. Irritating vapor is produced. Boiling point is 99°F.					
File         POISONOUS GASES ARE PRODUCED IN FIRE. Containers may explode in fire. Flashback along vapor trail may occur. Vapor may explode if girled in an encised area. Wear goggles and self-contained breathing apparatus. Exinguish with dry chemicals, alcohol foraus, alcohol foraus. Water may be ineffective on fire. Cool exposed containers with water.           Exposure         Call for medical aid. Vapor may be ineffective on fire. LiQUID Initiating to eyes, nose and throat. Move vicitm to fresh air. LIQUID Initiating to eyes, nose and throat. Move vicitm to fresh air. LIQUID Initiating to sin and eyes. Hermful if swallowed. Remove contaminated clothing and shoes. Fush affected areas with plenty of water. If is NEVES, hold eyelics open and flash with plenty of water. If is NEVES, hold eyelics open and flash with plenty of water. If is NEVES, hold eyelics open and flash with plenty of water. If is NEVES, hold eyelics open and flash with water or mik and base vicit micker volum is UNCONSCIOUS on HAVING CON- VULSIONS, do nothing except keep vicitim warm.           Water Pollution         Effect of two concentrations on aquatic life is urknown. May be dangerous if it enters water intakes. Notify local health and wildfile officials. Notify operators of nearby water intakes.         2. CHEMICAL DESIGNATIONS 2.1 CG Compatibility Group: Not listed. 2.2 Formula: (Chils) 3.3 Treatment State Exposure: Inhelation causes moderate initiation of upper respiratory system. Contact of liquid with eyes sciences moderate initiation of upper respiratory system. Contact of liquid with eyes sciences moderate initiation of upper respiratory system. Contact of liquid with eyes sciences moderate initiation of upper respiratory system. Contact of liquid with eyes sciences moderate initiation of upper respiratory system. Contact of liquid with eyes sciences moderate initis and use to notify eyesteremeter for any lasts of warm w	Avoid inhal Shut off igr Evacuate a Notify loca	ation. hition sources. area in case of I health and pol	large discharge.					
LADOSUTE         VAPOR           Irritating to eyes, nose and throat.         Move victim to fresh air.           LOUID         Irritating to skin and eyes.           Harmfull if swallowed.         Remove contaminated clothing and shoes.           Flush affected areas with plenty of water.         IF NETES, hold eyelids open and flush with plenty of water.           IF SWALLOWED and victim is CONSCIOUS. have victim drink water or milk and have victim induce vormting.         IF SWALLOWED and victim is UNCONSCIOUS. have victim drink water or milk and have victim induce vormting.           IF SWALLOWED and victim is UNCONSCIOUS. have victim drink water or milk and have victim induce vormting.         IF SWALLOWED and victim is UNCONSCIOUS. have victim drink water or milk and have victim induce vormting.           IF SWALLOWED and victim is UNCONSCIOUS.         Rev Intakes.         Notify operators of nearby water intakes.           Notify operators of nearby water intakes.         Notify operators of nearby water intakes.         1 CG Compatibility Group: Not listed.           2.2 Formula: (CH-h):S         CHellicular Classification: 51549         2 Formula: (CH-h):S         2 Formula: (CH-h):S           3.1 Personal Protective Equipment: Respirator with organic vapor canister; rubber or plastic gloves; goggles or face shid.         2 Formula: CH-h):S         2 Formula: CH-h):S           3.1 Personal Protective Equipment: Respirator with organic vapor canister; rubber or plastic gloves; goggles or face shid.         2 Formula: CH-h):S	Fire	POISONOUS Containers rr Flashback all Vapor may e Wear goggle Extinguish w Water may b	FLAMMABLE. POISONOUS GASES ARE PRODUCED IN FIRE. Containers may explode in fire. Flashback along vapor trail may occur. Vapor may explode if ignited in an enclosed area. Wear goggles and self-contained breathing apparatus. Extinguish with dry chemicals, alcohol foam, or carbon dioxide. Water may be ineffective on fire.					
May be dangerous if it enters water intakes.         Pollution       Notify operators of nearby water intakes.         Notify operators of nearby water intakes.       Notify operators of nearby water intakes.         1. CORRECTIVE RESPONSE ACTIONS Dilute and disperse Stop discharge Contain Collection Systems: Skim Do not burn       2. CHEMICAL DESIGNATIONS         2.1 CG Compatibility Group: Not listed.       2.4 Formula: (CH-b)S         2.3 IM/OUN Designation: 3.1/1164       2.4 DOT ID No.: 1164         2.4 DOT ID No.: 75-18-3       3.6 NARE Guide No.: 130         2.7 Standard Industrial Trade Classification: 51549         3.1 Personal Protective Equipment: Respirator with organic vapor canister; rubber or plastic gloves; goggles or face shield.         3.2 Symptoms Following Exposure: Inhalation causes moderate irritation of upper respiratory system. Contact of liquid with eyes causes moderate irritation. Repeated contact with skin may extract oils and result in irritation. Ingestion causes nause and wiration of mouth and stomach.         3.3 Treatment of Exposure: INHALATION: move victim to fresh air at once; enforce rest, and keep warm; get medical attention. SKIN: flush with plenty of water and wash thoroughly; get treatment for any lasting irritation. INCESTION: if large amounts are swallowed, induce vomiting by tickling the back of the throat with the finger or by giving an emetic such as two tablespoons of common salt in a glass of warm water; get medical attention.         3.4 TU-V-TW: Not listed.       3.5 Tu-STEL: Not listed.         3.10 Vapor (Gas) Irritant Characteristics:: Vapors are moderately iri	Exposure	Call for medical aid. VAPOR Irritating to eyes, nose and throat. Move victim to fresh air. LIQUID Irritating to skin and eyes. Harmful if swallowed. Remove contaminated clothing and shoes. Flush affected areas with plenty of water. IF NWALLOWED and victim is CONSCIOUS, have victim drink water or milk and have victim induce vomiting. IF SWALLOWED and victim is CONSCIOUS OR HAVING CON-						
Dilute and disperse         Stop discharge         Contain         Collection Systems: Skim         Do not burn         2.1       CG Compatibility Group: Not listed.         2.2       Formula: (CHb):S         2.3       IMO/UN Designation: 3.1/1164         2.4       DOT ID Not: 1164         2.5       CAS Registry Not: 75-18-3         2.6       NAERG Guide Not: 130         2.7       Standard Industrial Trade Classification: 51549         3.1       Personal Protective Equipment: Respirator with organic vapor canister; rubber or plastic gloves; goggles or face shield.         3.2       Symptoms Following Exposure: Inhalation causes moderate irritation of upper respiratory system. Contact of liquid with eyes causes moderate irritation of moth and stomach.         3.3       Treatment of Exposure: INHALATION: move victim to fresh air at once; enforce rest, and keep warry get medical attention immediatey. EYES: It this with water for at least 15 mir; if irritation persists, get medical attention. INGESTION: if large amounts are swallowed, induce vomiting by tickling the back of the throat with the finger or by giving an emetic such as two tablespoons of common salt in a glass of warm water, get medical attention.         3.4       TU-YTW: Not listed.         3.5       TU-STEL: Not listed.         3.6       TLV-STEL: Not listed.         3.7       Toxicity by Inhalation: Currently not available. <th></th> <th>May be dang Notify local h</th> <td>gerous if it enters water intakes. nealth and wildlife officials.</td>		May be dang Notify local h	gerous if it enters water intakes. nealth and wildlife officials.					
<ul> <li>3.1 Personal Protective Equipment: Respirator with organic vapor canister; rubber or plastic gloves; goggles or face shield.</li> <li>3.2 Symptoms Following Exposure: Inhalation causes moderate irritation of upper respiratory system. Contact of liquid with eyes causes moderate irritation. Repeated contact with skin may extract oils and result in irritation. Ingestion causes nauses and irritation of mouth and stomach.</li> <li>3.3 Treatment of Exposure: INHALATION: move vicitim to frss hair at once; enforce rest, and keep warm; get medical attention immediately. EYES: flush with water for at least 15 min; if irritation persists, get medical attention. SKIN: flush with period wash thoroughly; get treatment for any lasting irritation. INGESTION: if large amounts are swallowed, induce vomiting by tickling the back of the throat with the finger or by giving an emetic such as two tablespoons of common salt in a glass of warm water; get medical attention.</li> <li>3.4 TLV-TWA: Not listed.</li> <li>3.5 TLV-STEL: Not listed.</li> <li>3.6 TLV-Ceiling: Not listed.</li> <li>3.10 Evonic Toxicity: Currently not available.</li> <li>3.9 Chronic Toxicity: Currently not available.</li> <li>3.10 Evonic Toxicity: Currently not available.</li> <li>3.11 Liquid or Solid Characteristics: Causes smarting of the skin and first-degree burns on short exposure and may cause second-degree burns on long exposure.</li> <li>3.12 Odor Threshold: .001 ppm</li> <li>3.13 DLH value: Not listed.</li> <li>3.16 OSHA PEL-TWA: Not listed.</li> <li>3.16 OSHA PEL-TWA: Not listed.</li> </ul>			2.5 CAS Registry No.: 75-18-3 2.6 NAERG Guide No.: 130 2.7 Standard Industrial Trade Classification:					
	3.2 Symptoms Fol Contact of and result i 3.3 Treatment of E get medica get medica lasting irrit of the thro: glass of w: 3.4 TLV-TWA: Not 3.5 TLV-STEL: Not 3.5 TLV-STEL: Not 3.6 TLV-Ceiling: N 3.7 Toxicity by Ing 3.8 Toxicity by Ing 3.8 Toxicity by Ing 3.9 Chronic Toxici 3.10 Vapor (Gas) IT usually tole 3.11 Liquid or Soli exposure a 3.12 Odor Thresho 3.13 IDLH Value: N 3.14 OSHA PEL-ST 3.16 OSHA PEL-ST	face shield. <b>lowing Expose</b> liquid with eyes n irritation. Ing <b>xposure:</b> INH I attention imm I attention. SK attention. SK attention. SK attention. SK attention. SK attention. SK ilisted. I listed. ot listed. <b>estion:</b> Grade <b>alation:</b> Currer <b>ty:</b> Currently no <b>ritant</b> Characci rate moderate <b>id</b> Characterist and may cause <b>id</b> : 0.001 ppm <b>id</b> : 0.001 p	ent: Respirator with organic vapor canister; rubber or plastic gloves; ure: Inhalation causes moderate irritation of upper respiratory system. s causes moderate irritation. Repeated contact with skin may extract oils jestion causes nauses and irritation of mouth and stomach. ALATION: move victim to fresh air at once; enforce rest, and keep warm; ediately. EYES: flush with water for at least 15 min.; if irritation persists, N: flush with plenty of water and wash thoroughly; get treatment for any ION: if large amounts are swallowed, induce vomiting by tickling the back or or by giving an emetic such as two tablespoons of common salt in a medical attention. 2; oral LD <sub>20</sub> = 535 mg/kg (rat) htly not available. ot available eristics: Vapors are moderately irritating such that personnel will not or high vapor concentrations. ics: Causes smarting of the skin and first-degree burns on short second-degree burns on long exposure.					

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	4. FIRE HAZARDS	7. SHIPPING INFORMATION
_	4.1 Flash Point:	7.1 Grades of Purity: 99.8%
	–36°F C.C.	7.2 Storage Temperature: Ambient
	4.2 Flammable Limits in Air: 2.2%-19.7% 4.3 Fire Extinguishing Agents: Dry	7.3 Inert Atmosphere: No requirement
	chemical, foam, alcohol foam, carbon	7.4 Venting: Pressure-vacuum
	dioxide. 4.4 Fire Extinguishing Agents Not to Be	7.5 IMO Pollution Category: Currently not available 7.6 Ship Type: Currently not available
	Used: Water may be ineffective.	7.7 Barge Hull Type: Currently not available
	4.5 Special Hazards of Combustion Products: Toxic and irritating sulfur	
	dioxide is formed.	8. HAZARD CLASSIFICATIONS
	4.6 Behavior in Fire: Vapor is heavier than air and may travel considerable distance	8.1 49 CFR Category: Flammable liquid
	to source of ignition and flash back.	8.2 49 CFR Class: 3 8.3 49 CFR Package Group:
	4.7 Auto Ignition Temperature: 403°F	8.4 Marine Pollutant: Yes
	4.8 Electrical Hazards: Currently not available	8.5 NFPA Hazard Classification:
	4.9 Burning Rate: 4.8 mm/min.	Category Classification
	4.10 Adiabatic Flame Temperature: Currently not available	Health Hazard (Blue)
	4.11 Stoichometric Air to Fuel Ratio: 21.4	Instability (Yellow)
_	(calc.)	8.6 EPA Reportable Quantity: Not listed.
	4.12 Flame Temperature: Currently not available	8.7 EPA Pollution Category: Not listed.
	4.13 Combustion Molar Ratio (Reactant to	8.8 RCRA Waste Number: Not listed
	Product): 6.0 (calc.)	8.9 EPA FWPCA List: Not listed
	4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed	9. PHYSICAL & CHEMICAL
	· · ·	PROPERTIES
	5. CHEMICAL REACTIVITY	9.1 Physical State at 15° C and 1 atm: Liquid
	5.1 Reactivity with Water: No reaction	9.2 Molecular Weight: 62.1
	5.2 Reactivity with Common Materials: No reaction	<b>9.3 Boiling Point at 1 atm:</b> 99°F = 37°C = 310°K
	5.3 Stability During Transport: Stable	9.4 Freezing Point: -144°F = -98°C = 175°K
	5.4 Neutralizing Agents for Acids and	<b>9.5 Critical Temperature:</b> 444.2°F = 229°C =
	Caustics: Not pertinent 5.5 Polymerization: Not pertinent	502.2°K 9.6 Critical Pressure: 826 psia = 56.1 atm = 5.69
	5.6 Inhibitor of Polymerization: Not pertinent	MN/m <sup>2</sup>
		9.7 Specific Gravity: 0.85 at 20°C (liquid)
	6. WATER POLLUTION	9.8 Liquid Surface Tension: 26.5 dynes/cm = 0.0265 N/m at 11°C
	6.1 Aquatic Toxicity:	9.9 Liquid Water Interfacial Tension: (est.) 30
	Currently not available 6.2 Waterfowl Toxicity: Currently not	dynes/cm = 0.030 N/m at 20°C
	available	9.10 Vapor (Gas) Specific Gravity: 2.14 9.11 Ratio of Specific Heats of Vapor (Gas):
	6.3 Biological Oxygen Demand (BOD): Approximately 1 lb/lb	1.1277 at 16°C
	6.4 Food Chain Concentration Potential:	9.12 Latent Heat of Vaporization: 194 Btu/lb =
	None	108 cal/g = 4.52 X 10 <sup>5</sup> J/kg 9.13 Heat of Combustion: -13,200 Btu/lb =
	6.5 GESAMP Hazard Profile: Bioaccumulation: T	$-7,340 \text{ cal/g} = -307 \text{ X } 10^5 \text{ J/kg}$
	Damage to living resources: -	9.14 Heat of Decomposition: Not pertinent
	Human Oral hazard: 1 Human Contact hazard: I	9.15 Heat of Solution: Not pertinent
	Reduction of amenities: XX	9.16 Heat of Polymerization: Not pertinent 9.17 Heat of Fusion: 30.73 cal/g
		9.18 Limiting Value: Currently not available
ls		9.19 Reid Vapor Pressure: Currently not
n:		available
, ,	NOT	ES
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## **DIMETHYL SULFIDE**

9.20 SATURATED LIQUID DENSITY		9.21 LIQUID HEAT CAPACITY		9.22 LIQUID THERMAL CONDUCTIVITY		9.23 LIQUID VISCOSITY	
Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F	Temperature (degrees F)	British thermal unit inch per hour-square foot-F	Temperature (degrees F)	Centipoise
35 40 45 50 55 60 65 70 75 80 85 90 95	54.180 53.970 53.770 53.560 53.140 52.930 52.730 52.521 52.100 51.890 51.690	35 40 45 50 55 60 65 70 75 80 85 90 95	0.440 0.441 0.442 0.443 0.444 0.445 0.446 0.447 0.448 0.448 0.448 0.448 0.449 0.450 0.451	35 40 45 50 55 60 65 70 75 80 80 85 90 95	0.953 0.943 0.933 0.923 0.913 0.803 0.893 0.873 0.863 0.853 0.853 0.842 0.832	0 5 10 15 20 25 30 35 40 45 55 60 55 60 65 70 75 80 85	0.419 0.406 0.394 0.382 0.371 0.361 0.351 0.341 0.324 0.315 0.308 0.300 0.293 0.286 0.279 0.273 0.267

9.24 SOLUBILITY IN WATER		9.25 SATURATED VAPOR PRESSURE		9.26 SATURATED VAPOR DENSITY		9.27 IDEAL GAS HEAT CAPACITY	
Temperature (degrees F)	Pounds per 100 pounds of water	Temperature (degrees F)	Pounds per square inch	Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F
77	2.000	-50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120	0.261 0.374 0.528 0.733 1.003 1.354 1.805 2.377 3.095 3.988 5.088 6.431 8.057 10.010 12.340 15.090 18.330 22.120	-50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120	0.00368 0.00516 0.00710 0.01290 0.01290 0.02223 0.02867 0.03657 0.04618 0.06776 0.07159 0.06779 0.07759 0.12980 0.12980 0.18620 0.22080	0 25 50 75 100 125 150 175 200 225 250 250 325 350 325 350 375 400 425 450 525 550 575 600	0.252 0.258 0.265 0.272 0.278 0.285 0.299 0.305 0.312 0.319 0.325 0.332 0.339 0.346 0.352 0.359 0.366 0.377 0.386 0.379 0.386 0.399 0.406 0.413