

HEALTH AND SAFETY

OUTLINE

1. Health hazards and precautions for dealing with spilt oil
2. Safety hazards and precautions

HEALTH HAZARDS OF SPILT OIL

- ✓ Effects of vapours
- ✓ Inhalation (aspiration)
- ✓ Skin contact
- ✓ Ingestion

HAZARD DATA SHEETS (PROPERTIES)

Substance Name BENZENE	UN - No. 1114	CAS - No. 000071432	Formula C6H6		
Health Hazards	Materials may be poisonous if inhaled or absorbed through skin. Vapours may cause dizziness or suffocation. Contact may irritate or burn skin and eyes. Fire may produce irritating or poisonous gases.				
Fire/Explosive Hazards	These materials are flammable or combustible: danger of explosion. They may be ignited by heat, sparks or flames. Vapours may travel to a source of ignition.				
Environmental Hazards	Substance presents a hazard to either marine resources or human health or causes harm to amenities or other legitimate uses of the sea.				
Health Hazards	TLV 10	IDLH Ca	Carcinogen Yes	Skinsensitizer -	Neurotoxic -
Che./Phys. Data	State Liquid		Density 0.88	Boil Pt. 80	Flash pt -11
	Solubility in water: 0.07%				
	Behaviour i/o water: evaporates rapidly				
Chem. Reactive	Water: No, Air: Yes, OxidAgts: yes, Acids : Yes, Alkalis: No, Other Substances: Yes, Self reac: No, Polym: No, Decom: No				
Unsuit. With	Metals: No, Plastics: No, Rubber: Yes, Others: U				

HAZARD DATA SHEETS (RESPONSE)

Protection Equipment	Goggles; self-contained breathing apparatus; spray nozzle
Emergency Actions	Isolate a wide ranged area; keep unnecessary people away. Stay upwind and out of low areas
Emergency Actions in case of Fire	Extinguish with water spray, standard foam, CO2, or halon. Cool container with water from the side until well after fire is out. Withdraw immediately if safety valve blows off or tank discolours. Stay away from ends of tank
Emergency Actions in case of Spills	Beware of ignition sources. Stop leak if you can do it without risk. Water spray may reduce vapour, but it may not prevent ignition in closed spaces. Take up the spill with a non- combustible absorbent. Dike far ahead of spill for later disposal.

HYDROGEN SULPHIDE (H₂S)

- ✓ Hazardous atmospheres
- ✓ Highly volatile
- ✓ May be a threat in some oils
- ✓ Reduces as oil weathers

INITIAL TOXIC EFFECTS OF H₂S

- ✓ Dulls the sense of smell
يضعف حاسة الشم
- ✓ Makes one dizzy
 يجعل المرأة يشعر بالدوار
- ✓ Headache
صداع
- ✓ Irritates the eyes
يهدى العيون

INCREASED EXPOSURE TO H₂S

- ✓ Staggering
صاعق
- ✓ Confusion
ارتباك
- ✓ Loss of consciousness
فقدان الوعي

LARGE EXPOSURE TO H₂S

- ✓ Arrest of breathing
توقف التنفس
- ✓ Arrest of heart
سكتة قلبية
- ✓ Death
الوفاة

TOXICITY TO HUMAN BEINGS

INHALATION

Breathing of liquid into the lungs from a leaking pump or spraying of dispersants

SKIN CONTACT

- Skin layers
- Hair follicles
- Sweat glands

INGESTION

- Wash with soap and water before eating
- In case of ingestion - seek urgent medical advice

PRECAUTIONS

Wear protective masks with appropriate filters

PRECAUTIONS

- Remove oil from skin as quickly as possible
- Use soap and water or
- Use special cleaner
- Flush eyes with water if oil gets into them
- If necessary use protective clothing

INDICATION OF POTENTIAL TOXIC EXPOSURE

- ✓ Sudden weight loss or change in appetite
فقدان الوزن المفاجئ أو تغير في الشهية
- ✓ Unusual fatigue or new sleeping difficulties
إرهاق غير عادي أو صعوبات نوم جديدة
- ✓ Unusual irritability
تهيج غير عادي
- ✓ Skin rashes/allergies/ sores
طفح جلدي / حساسية / تقرحات
- ✓ Hearing loss
فقدان السمع
- ✓ Vision loss/problems
فقدان الرؤية / مشاكل
- ✓ Changes in sense of smell
تغيرات في حاسة الشم
- ✓ Shortness of breath/ asthma/cough or sputum production
ضيق التنفس / الربو / السعال أو إفراز البلغم
- ✓ Chest pains
آلام في الصدر
- ✓ Nausea/vomiting/diarrhoea/constipation
الغثيان / القيء / الإسهال / الإمساك
- ✓ Weakness/tremors
الضعف / الهتزات
- ✓ Personality changes
تغيرات في الشخصية

SAFETY HAZARDS

FIRE/EXPLOSION HAZARD

May be present in early stages with fresh crude and light fuels

Risk Diminishes as Oil Weathers

POTENTIALLY FLAMMABLE CONDITIONS

- Determine hazards for specific product
- Assess impact of delaying response action
- Monitor atmosphere
- Approach and work up-wind

PERSONAL SAFETY

- Hearing, head and eye protection
- Gloves and protective footwear
- Coveralls/slicker suits
- Lifejackets & Insulated clothing
- Respirator protection
- Awareness, Preparedness & Procedures

PUBLIC SAFETY

- Keep public at safe distance – put up notices and barriers
- Keep volunteers out unless authorised by higher authority (eg bird cleaners)
- Instruct representatives from the media on essential safety precautions

THANK YOU FOR YOUR ATTENTION