# **International Chemical Safety Cards**

PARATHION ICSC: 0006

### **PARATHION**

O,O-Diethyl-O-(4-nitrophenyl)phosphorothioate Phosphorothioic acid O,O-diethyl O-(4-nitrophenyl)ester Ethyl parathion; thiophos  $(C_2H_5O)_2PSOC_6H_4NO_2$ Molecular mass: 291.27

CAS # 56-38-2 RTECS # TF4550000 ICSC # 0006 UN # 3018 EC # 015-034-00-1

SPILLAGE DISPOSAL

Evacuate danger area! Consult an

and spilled liquid in sealable

expert! Ventilation. Collect leaking

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Combustible.	NO open flames.	Powder, water spray, foam, carbon dioxide.
EXPLOSION			In case of fire: keep drums, etc., cool by spraying with water.
EXPOSURE		PREVENT GENERATION OF MISTS! STRICT HYGIENE! AVOID EXPOSURE OF ADOLESCENTS AND CHILDREN!	IN ALL CASES CONSULT A DOCTOR!
• INHALATION	Convulsions. Diarrhoea. Dizziness. Headache. Laboured breathing. Unconsciousness. Vomiting. Weakness. Pupillary constriction, muscle cramp, excessive salivation.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Artificial respiration if indicated. Refer for medical attention.
• SKIN	MAY BE ABSORBED! (further see Inhalation).	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap. Refer for medical attention.
• EYES	VAPOUR WILL BE ABSORBED! Redness. Pain. Blurred vision.	Face shield or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
• INGESTION	Abdominal cramps (further see Inhalation).	Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth. Induce vomiting (ONLY IN CONSCIOUS PERSONS!). Give plenty of water to drink. Refer for medical attention.

**STORAGE** 

oxidants. Cool. Dry. Keep locked up.

Fireproof. Separated from strong

**PACKAGING &** 

**LABELLING** 

T+ symbol

R: 27/28

containers as far as possible. Absorb remaining liquid in sand or inert absorbent and remove to safe place. Cautiously neutralize remainder with an alkaline substance (extra personal protection: self-contained breathing apparatus).

| S: 28-36/3/-45 | UN Hazard Class: 6.1

#### SEE IMPORTANT INFORMATION ON BACK

ICSC: 0006

Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities © IPCS CEC 1993

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I M	PHYSICAL STATE; APPEARANCE: PALE YELLOW TO BROWN (TECHNICAL PRODUCT) LIQUID, WITH CHARACTERISTIC ODOUR.	ROUTES OF EXPOSURE:  The substance can be absorbed into the body by inhalation of its aerosol, through the skin, by ingestion and through the eyes.
P O	PHYSICAL DANGERS: The vapour is heavier than air and may travel along the ground; distant ignition possible.	INHALATION RISK: Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly on spraying.
R	CHEMICAL DANGERS: The substance decomposes on heating	EFFECTS OF SHORT-TERM EXPOSURE:
T	producing toxic gases including carbon monoxide, sulfur oxides, phosphorous oxides,	The substance irritates the eyes, the skin and the respiratory tract. The substance may cause
A	nitrogen oxides. Reacts with strong oxidants. Attacks some forms of plastics, rubber and	effects on the nervous system, resulting in convulsions, respiratory failure, muscle
N T	coatings. Rapidly hydrolysed by alkalis.	weakness. Cholinesterase inhibitor. Exposure may result in death. The effects may be
1	OCCUPATIONAL EXPOSURE LIMITS (OELs): TLV: ppm; 0.1 mg/m <sup>3</sup> (skin) (ACGIH 1992-1993).	delayed. Medical observation is indicated.  EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:
D	PDK: 0.05 mg/m <sup>3</sup> P (USSR 1987).	Cholinesterase inhibitor; cumulative effect is possible: see acute hazards/symptoms.
A T		
A		
PHYSICAL PROPERTIES	Boiling point: 375°C Melting point: 6°C Relative density (water = 1): 1.26 Solubility in water, ml/100 ml at 25°C: 0.0024	Vapour pressure, Pa at 20°C: 0.005 Relative vapour density (air = 1): 10 Flash point: 120-160°C
ENVIRONMENTAL DATA		

#### NOTES

Technical grade may contain flammable impurities. Depending on the degree of exposure, periodic medical examination is indicated. The symptoms of lung oedema often do not become manifest until a few hours have passed and they are aggravated by physical effort. Rest and medical observation are therefore essential. Specific treatment is necessary in case of poisoning with this substance; the appropriate means with instructions must be available. Carrier solvents used in commercial formulations may change physical and toxicological properties. The odour warning when the exposure limit value is exceeded is insufficient. Do NOT take working clothes home.

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ADDITIONAL INFORMATION				
ICSC: 0006		PARATHION		
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