

# DIETHYLENE GLYCOL DINITRATE

1473

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CAS No: 693-21-0  
 RTECS No: ID6825000  
 UN No: 0075  
 EC No: 603-033-00-4

Diglycoldinitrate  
 Di(hydroxyethyl)ether dinitrate  
 Oxydiethylene dinitrate  
 DEGDN  
 $C_4H_8N_2O_7 / O_2NOC_2H_4OC_2H_4ONO_2$   
 Molecular mass: 196.1

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
<b>FIRE</b>	Explosive. Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames, NO sparks, and NO smoking.	Powder, water spray, foam, carbon dioxide, Note: Evacuate area, fight fires only from an explosion-resistant location.
<b>EXPLOSION</b>	Risk of fire and explosion.	Prevent build-up of electrostatic charges (e.g., by grounding). Use non-sparking handtools. Do NOT expose to friction or shock.	In case of fire: cool drums, etc., by spraying with water but avoid contact of the substance with water. Combat fire from a sheltered position.

EXPOSURE		STRICT HYGIENE!	IN ALL CASES CONSULT A DOCTOR!
<b>Inhalation</b>	Flushing of the face. Hypotension. Dizziness. Headache. Nausea. Weakness. Blue lips or finger nails. Blue skin. Confusion. Convulsions. Unconsciousness.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Refer for medical attention.
<b>Skin</b>	MAY BE ABSORBED! (See Inhalation).	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap. Refer for medical attention.
<b>Eyes</b>		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.
<b>Ingestion</b>	(See Inhalation).	Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth. Give a slurry of activated charcoal in water to drink. Induce vomiting (ONLY IN CONSCIOUS PERSONS!). Refer for medical attention.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Evacuate danger area! Consult an expert! Collect leaking and spilled liquid in sealable containers as far as possible. Absorb remaining liquid in sand or inert absorbent and remove to safe place. Do NOT let this chemical enter the environment. (Extra personal protection: complete protective clothing including self-contained breathing apparatus.)	E Symbol T+ Symbol R: 3-26/27/28-33-52/53 S: (1/2-)33-35-36/37-45-61 UN Hazard Class: 1.1D Do not transport with food and feedstuffs.

EMERGENCY RESPONSE	STORAGE
	Fireproof. Store in separate building. Separated from acids, food and feedstuffs. Cool. Well closed.

### IMPORTANT DATA

**Physical State; Appearance**

LIQUID

**Physical dangers**

As a result of flow, agitation, etc., electrostatic charges can be generated.

**Chemical dangers**

Heating may cause violent combustion or explosion producing toxic fumes of nitrogen oxides. May decompose explosively on shock, friction, or concussion. Reacts with acids.

**Occupational exposure limits**

MAK: IIb (see Notes); H (DFG 2002).

**Routes of exposure**

The substance can be absorbed into the body by inhalation of its aerosol, through the skin and by ingestion.

**Inhalation risk**

A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20°C.

**Effects of short-term exposure**

The substance may cause effects on the cardiovascular system, central nervous system and blood, resulting in impaired functions and the formation of methaemoglobin. The effects may be delayed. Medical observation is indicated.

**Effects of long-term or repeated exposure**

The substance may have effects on the cardiovascular system, resulting in cardiac disorders.

### PHYSICAL PROPERTIES

Boiling point at 0.9 kPa: 139°C

Melting point: 2°C

Vapour pressure, Pa at 20°C: 0.5

### ENVIRONMENTAL DATA

The substance is harmful to aquatic organisms.

### NOTES

Use of alcoholic beverages enhances the harmful effect.

Depending on the degree of exposure, periodic medical examination is suggested.

Specific treatment is necessary in case of poisoning with this substance; the appropriate means with instructions must be available.

Rinse contaminated clothes (fire hazard) with plenty of water.

MAK value not established but full documentation is available (MAK IIb).

### ADDITIONAL INFORMATION

**LEGAL NOTICE**

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible for the use which might be made of this information