

# I U C L I D

# D a t a s e t

Existing Chemical	Substance ID: 3845-76-9
CAS No.	3845-76-9
EINECS Name	N-[3-(dimethylamino)propyl]acrylamide
EINECS No.	223-342-4
Molecular Weight	156
Molecular Formula	C8H16N2O

Dataset created by: EUROPEAN COMMISSION - European Chemicals Bureau

This dossier is a compilation based on data reported by the European Chemicals Industry following 'Council Regulation (EEC) No. 793/93 on the Evaluation and Control of the Risks of Existing Substances'. All (non-confidential) information from the single datasets, submitted in the IUCLID/HEDSET format by individual companies, was integrated to create this document.

The data have not undergone any evaluation by the European Commission.

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**1.0.1 OECD and Company Information**

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**1.0.2 Location of Production Site**

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**1.0.3 Identity of Recipients**

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**1.1 General Substance Information**

Substance type: organic  
Physical status: liquid

**1.1.1 Spectra**

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**1.2 Synonyms**

2-Propenamide, N-[3-(dimethylamino)propyl]-  
Source: Stockhausen GmbH & Co.KG Krefeld

**1.3 Impurities**

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**1.4 Additives**

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**1.5 Quantity**

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**1.6.1 Labelling**

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**1.6.2 Classification**

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**1.7 Use Pattern**

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**1.7.1 Technology Production/Use**

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### **1.8 Occupational Exposure Limit Values**

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### **1.9 Source of Exposure**

**Remark:** closed process  
**Source:** Stockhausen GmbH & Co.KG Krefeld

### **1.10.1 Recommendations/Precautionary Measures**

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### **1.10.2 Emergency Measures**

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### **1.11 Packaging**

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### **1.12 Possib. of Rendering Subst. Harmless**

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### **1.13 Statements Concerning Waste**

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### **1.14.1 Water Pollution**

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### **1.14.2 Major Accident Hazards**

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### **1.14.3 Air Pollution**

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### **1.15 Additional Remarks**

**Remark:** Germany: The product is classified in Wassergefährdungs-  
klasse "WGK" 1.  
The product is not restricted according to dangerous goods  
regulations.  
Literature

- [1] BEILSTEIN 4, IV, 1268
- [2] US.P. 2 773 063 Rohm & Haas Co (1954)
- [3] US.P. 2 595 907 Am. Cyanamide Co (1950)
- [4] O.S. 2 354 602 Kohjin Co Ltd. Tokyo
- [5] DE 28 19735 C2 [C07C103/58] Stockhausen GmbH, Krefeld
- [6] DE 28 36520 C2 [C07C103/58] Stockhausen GmbH, Krefeld
- [7] DE 29 18486 C2 [C07C103/64] Stockhausen GmbH, Krefeld

- [8] OS DE 32 35 389 A1 [C07C103/58], Stockhausen, Krefeld
- [9] DP 31 28 574 Texaco
- [10] DP 31 28 575 Texaco
- [11] DE AS 25 02 247
- [12] US.P. 4 031 138
- [13] US.P. 3 878 247 Jefferson
- [14] DE OS 26 23 838 BASF

**Source:** Stockhausen GmbH & Co.KG Krefeld

### **1.16 Last Literature Search**

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### **1.17 Reviews**

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### **1.18 Listings e.g. Chemical Inventories**

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### 2.1 Melting Point

**Value:**  
**Decomposition:** no  
**Sublimation:** no  
**Source:** Stockhausen GmbH & Co.KG Krefeld

### 2.2 Boiling Point

**Value:** ca. 106 - 108 degree C at 1 hPa  
**Decomposition:** no  
**Method:** other: Literature [1]  
**Source:** Stockhausen GmbH & Co.KG Krefeld

### 2.3 Density

**Type:** density  
**Value:** = .966 g/cm3 at 20 degree C  
**Year:** 1990  
**GLP:** no  
**Source:** Stockhausen GmbH & Co.KG Krefeld

#### 2.3.1 Granulometry

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### 2.4 Vapour Pressure

**Value:** = .06 hPa at 20 degree C  
**Year:** 1990  
**GLP:** no  
**Source:** Stockhausen GmbH & Co.KG Krefeld

### 2.5 Partition Coefficient

**log Pow:** = -.92 at 20 degree C  
**Method:** other (calculated): LEO  
**Year:** 1987  
**GLP:** no  
**Source:** Stockhausen GmbH & Co.KG Krefeld

#### 2.6.1 Water Solubility

**Value:** > 9999 g/l at 20 degree C  
**Qualitative:** miscible  
**pH:** ca. 11 - 12 at 500 g/l and 20 degree C  
**Method:** other  
**Year:** 1987  
**GLP:** no  
**Source:** Stockhausen GmbH & Co.KG Krefeld

**2.6.2 Surface Tension**

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**2.7 Flash Point**

**Value:** ca. 141 degree C  
**Type:** closed cup  
**Method:** other: DIN 51758  
**Year:** 1987  
**GLP:** no  
**Source:** Stockhausen GmbH & Co.KG Krefeld

**2.8 Auto Flammability**

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**2.9 Flammability**

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**2.10 Explosive Properties**

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**2.11 Oxidizing Properties**

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**2.12 Additional Remarks**

**Remark:** Partition Coefficient: Bioaccumulation is not to be expected.  
According to MACKEY I the substance goes 100% in the compartment "water".

**Source:** Stockhausen GmbH & Co.KG Krefeld

**3.1.1 Photodegradation**

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**3.1.2 Stability in Water**

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**3.1.3 Stability in Soil**

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**3.2 Monitoring Data (Environment)****Type of**

measurement: other: MACKEY I calculations

**Medium:****Source:** Stockhausen GmbH & Co.KG Krefeld**3.3.1 Transport between Environmental Compartments**

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**3.3.2 Distribution****Media:** water - soil**Method:** Calculation according Mackay, Level I**Year:** 1987**Source:** Stockhausen GmbH & Co.KG Krefeld**3.4 Mode of Degradation in Actual Use**

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**3.5 Biodegradation****Type:** aerobic**Inoculum:** activated sludge, domestic, adapted**Concentration:** 100 mg/l related to DOC (Dissolved Organic Carbon)**Degradation:** = 80 % after 28 day**Result:** inherently biodegradable**Method:****Year:****GLP:****Test substance:****Source:** Stockhausen GmbH & Co.KG Krefeld**3.6 BOD5, COD or BOD5/COD Ratio**

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**3.7 Bioaccumulation**

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**3.8 Additional Remarks**

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## AQUATIC ORGANISMS

### 4.1 Acute/Prolonged Toxicity to Fish

**Type:** static  
**Species:** Brachydanio rerio (Fish, fresh water)  
**Exposure period:** 96 hour(s)  
**Unit:** mg/l **Analytical monitoring:** no  
**LC50:** ca. 70 - 300  
**Method:** OECD Guide-line 203 "Fish, Acute Toxicity Test"  
**Year:** 1986 **GLP:** yes  
**Test substance:** as prescribed by 1.1 - 1.4  
**Source:** Stockhausen GmbH & Co.KG Krefeld

**Type:** static  
**Species:** Leuciscus idus (Fish, fresh water)  
**Exposure period:** 96 hour(s)  
**Unit:** mg/l **Analytical monitoring:** no  
**LC50:** ca. 130 - 200  
**Method:** OECD Guide-line 203 "Fish, Acute Toxicity Test"  
**Year:** 1987 **GLP:** yes  
**Test substance:** as prescribed by 1.1 - 1.4  
**Source:** Stockhausen GmbH & Co.KG Krefeld

### 4.2 Acute Toxicity to Aquatic Invertebrates

**Species:** Daphnia magna (Crustacea)  
**Exposure period:** 48 hour(s)  
**Unit:** mg/l **Analytical monitoring:** no  
**EC50:** = 180  
**Method:** OECD Guide-line 202, part 1 "Daphnia sp., Acute Immobilisation Test"  
**Year:** 1987 **GLP:** yes  
**Test substance:** as prescribed by 1.1 - 1.4  
**Source:** Stockhausen GmbH & Co.KG Krefeld

### 4.3 Toxicity to Aquatic Plants e.g. Algae

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### 4.4 Toxicity to Microorganisms e.g. Bacteria

**Type:** aquatic  
**Species:** Pseudomonas putida (Bacteria)  
**Exposure period:**  
**Unit:** mg/l **Analytical monitoring:** no  
**EC50:** = 30  
**MIC :** = 366  
**Method:** other: Deutsches Einheitsverfahren L8  
**Year:** 1987 **GLP:** yes  
**Test substance:** as prescribed by 1.1 - 1.4  
**Source:** Stockhausen GmbH & Co.KG Krefeld

**Type:** aquatic  
**Species:** Tetrahymena pyriformis (Protozoa)  
**Exposure period:**  
**Unit:** mg/l **Analytical monitoring:** no  
**EC50:** ca. 160  
**Method:** other: Erlanger Ziliatentest nach Prof. Gräf  
**Year:** 1986 **GLP:** no  
**Test substance:** as prescribed by 1.1 - 1.4  
**Source:** Stockhausen GmbH & Co.KG Krefeld

#### **4.5 Chronic Toxicity to Aquatic Organisms**

##### **4.5.1 Chronic Toxicity to Fish**

**Species:** Pimephales promelas (Fish, fresh water)  
**Endpoint:** length of young fish  
**Exposure period:** 28 day  
**Unit:** mg/l **Analytical monitoring:** no  
**NOEC:** = 1.3 - 3.3  
**Method:** OECD Guide-line draft "Early Life Stage Test (ELS-Test)"  
**Year:** 1988 **GLP:** yes  
**Test substance:** as prescribed by 1.1 - 1.4  
**Source:** Stockhausen GmbH & Co.KG Krefeld

##### **4.5.2 Chronic Toxicity to Aquatic Invertebrates**

**Species:** Daphnia magna (Crustacea)  
**Endpoint:** reproduction rate  
**Exposure period:** 2 day  
**Unit:** mg/l **Analytical monitoring:** no  
**EC50:** = 180  
**Method:** OECD Guide-line 202, part 2 "Daphnia sp., Reproduction Test"  
**Year:** 1987 **GLP:** yes  
**Test substance:** as prescribed by 1.1 - 1.4  
**Source:** Stockhausen GmbH & Co.KG Krefeld

**TERRESTRIAL ORGANISMS**

**4.6.1 Toxicity to Soil Dwelling Organisms**

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**4.6.2 Toxicity to Terrestrial Plants**

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**4.6.3 Toxicity to other Non-Mamm. Terrestrial Species**

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**4.7 Biological Effects Monitoring**

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**4.8 Biotransformation and Kinetics**

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**4.9 Additional Remarks**

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## **5.1 Acute Toxicity**

### **5.1.1 Acute Oral Toxicity**

**Type:** LD50  
**Species:** rat  
**Sex:**  
**Number of Animals:**  
**Vehicle:**  
**Value:** > 5600 mg/kg bw  
**Method:** OECD Guide-line 401 "Acute Oral Toxicity"  
**Year:** 1986 **GLP:** no  
**Test substance:** as prescribed by 1.1 - 1.4  
**Source:** Stockhausen GmbH & Co.KG Krefeld

### **5.1.2 Acute Inhalation Toxicity**

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### **5.1.3 Acute Dermal Toxicity**

**Type:** LD50  
**Species:** rat  
**Sex:**  
**Number of Animals:**  
**Vehicle:**  
**Value:** > 2000 mg/kg bw  
**Method:** OECD Guide-line 402 "Acute dermal Toxicity"  
**Year:** 1986 **GLP:** no  
**Test substance:** as prescribed by 1.1 - 1.4  
**Source:** Stockhausen GmbH & Co.KG Krefeld

### **5.1.4 Acute Toxicity, other Routes**

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## **5.2 Corrosiveness and Irritation**

### 5.2.1 Skin Irritation

**Species:** rabbit  
**Concentration:**  
  
**Exposure:**  
**Exposure Time:**  
**Number of Animals:**  
**PDII:**  
**Result:** slightly irritating  
**EC classificat.:** not irritating  
**Method:** OECD Guide-line 404 "Acute Dermal Irritation/Corrosion"  
**Year:** 1986 **GLP:** no  
**Test substance:** as prescribed by 1.1 - 1.4  
**Source:** Stockhausen GmbH & Co.KG Krefeld

### 5.2.2 Eye Irritation

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### 5.3 Sensitization

**Type:** Guinea pig maximization test  
**Species:** guinea pig  
**Number of Animals:**  
**Vehicle:**  
**Result:** not sensitizing  
**Classification:** not sensitizing  
**Method:** OECD Guide-line 406 "Skin Sensitization"  
**Year:** 1986 **GLP:** no  
**Test substance:** as prescribed by 1.1 - 1.4  
**Source:** Stockhausen GmbH & Co.KG Krefeld

### 5.4 Repeated Dose Toxicity

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### 5.5 Genetic Toxicity 'in Vitro'

**Type:** Ames test  
**System of testing:** Mutagenic Potential in Histidine auxotrophs  
**Concentration:** 25-2500 microgram per plate  
**Metabolic activation:** no data  
**Result:** negative  
**Method:** OECD Guide-line 471 "Genetic Toxicology: Salmonella thyphimurium Reverse Mutation Assay"  
**Year:** 1986 **GLP:** yes  
**Test substance:** as prescribed by 1.1 - 1.4  
**Source:** Stockhausen GmbH & Co.KG Krefeld

**5.6 Genetic Toxicity 'in Vivo'**

**Type:** Micronucleus assay  
**Species:** rat **Sex:**  
**Strain:** Sprague-Dawley  
**Route of admin.:** oral feed  
**Exposure period:** 16, 48, 72 hours  
**Doses:** 4069 mg/kg  
**Result:**  
**Method:** other: Directive EEC 79/831, annex V, 251-255  
**Year:** 1986 **GLP:** yes  
**Test substance:** as prescribed by 1.1 - 1.4  
**Source:** Stockhausen GmbH & Co.KG Krefeld

**5.7 Carcinogenicity**

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**5.8 Toxicity to Reproduction**

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**5.9 Developmental Toxicity/Teratogenicity**

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**5.10 Other Relevant Information**

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**5.11 Experience with Human Exposure**

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**7.1 Risk Assessment**

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