

**24 hour transportation emergency telephone number: Chemtrec 800-424-9300**

**EC safetydata sheet**

According to 91/155/EWG

**Developer SE5 Lith Part Ω**

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**1). substance-/ preparation and company name**

**Chemical name/** SE5 Lith part Ω Lith developer  
**Trade name:**  
**Application/use:** Photographic developer  
**Company name:** Wolfgang Moersch Photochemie, Am Heideberg 48  
D 50354 Hürth  
**Telephone:** ++49 22 33 943137

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**2). composition/details on components**

This product is a preparation according to the chemical law.

**Description: Aqueous solution containing ammonium carbonate**

**Composition/information about the components:**

<b>Name</b>	<b>Weight %</b>
<b>Ammonium carbonate</b>	<b>30</b>

**CAS:** 506-87-6

**Danger symbol:** Xn

**Danger notes**

**Other information:** Principal ingredient: water, ammonium carbonate

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**3). Possible risks**

**WARNING! HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT.**

**Potential Health Effects**

**Inhalation:**

May cause irritation of the nose, throat, and lungs. Ammonia vapors released upon decomposition may cause irritation of the upper respiratory tract, with coughing, vomiting, and redness to the mucous membranes. Higher concentrations (> 1000 ppm) may cause restlessness, tightness in the chest, pulmonary edema, weak pulse, and cyanosis.

**Ingestion:**

Causes irritation to the gastrointestinal tract. Symptoms may include nausea, vomiting and diarrhea.

**Eye Contact:**

Causes irritation, redness, and pain. Causes burning or serious burns if decontamination is delayed.

**Aggravation of Pre-existing Conditions:**

Persons with pre-existing lung disease may be more susceptible to the effects of this substance.

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#### 4). First Aid PRECAUTIONS

**Inhalation:**

Remove to fresh air. Get medical attention.

**Ingestion:**

Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person.

**Skin Contact:**

Immediately flush skin with plenty of water.

**Eye Contact:**

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

#### 5). PRECAUTIONS on Fire Fighting

**Fire:**

Not considered to be a fire hazard.

**Explosion:**

Generation of ammonia gas may be an explosion hazard.

**Fire Extinguishing Media:**

Use any means suitable for extinguishing surrounding fire.

**Special Information:**

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

#### 6). PRECAUTIONS at Unintentional Release

Ventilate area of leak or spill. Keep unnecessary and unprotected people away from area of spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

#### 7). Handling and Storage

**Indications for safe contact:**

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**Points on fire-and**

The product is not combustible.

**Explosion protection:**

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**Requirements on storerooms and container:**

None of special requests necessary.  
Keep in tightly closed container.

**Together storage notes:**

None of special measures required.

**Storage conditions:**

Recommended storage temperature: 5 to 25 C

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## 8). outline demarcation and personal protection equipment

### Airborne Exposure Limits:

For Ammonia:

- OSHA Permissible Exposure Limit (PEL) -  
50 ppm

- ACGIH Threshold Limit Value (TLV) -  
25 ppm (TWA), 35 ppm (STEL)

### Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

### Personal Respirators (NIOSH Approved):

If the exposure limit is exceeded and engineering controls are not feasible, a full facepiece respirator with an ammonia/methylamine cartridge may be worn up to 50 times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. WARNING: Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

### Skin Protection:

Wear impervious protective clothing, to prevent skin contact.

### Eye Protection:

Use chemical safety goggles where splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

## 9). physical and chemical qualities

<b>Form:</b>	Liquid
<b>Color:</b>	Colourless
<b>Smell:</b>	Strong ammonia-like odour
<b>pH value:</b>	12.6 (22 C)
<b>Boiling-point/boiling area:</b>	≥ 100 C
<b>Melting point/glaze area:</b>	≤ 0 C
<b>Flaming point:</b>	Not applicable
<b>Inflammatory/</b>	Not inflammable.
<b>Catching light temperature:</b>	
<b>Self-flammable:</b>	Not self flammable.
<b>Fire promoting</b>	Not combustible.
<b>Qualities:</b>	
<b>Danger of explosion:</b>	Not explosion dangerous.
<b>Vapor pression:</b>	Remark: Corresponds to the vapor pression of water.
<b>Density:</b>	1.15 g/cm <sup>3</sup> (20 C)
<b>Pouring density:</b>	Not applicable.
<b>Solubility into waters:</b>	Mixable.
<b>in other solvents:</b>	There are no data.
<b>Distribution coefficient</b>	There are no data.
<b>n-Oktanol/water:</b>	
<b>Dynamic viscosity:</b>	There are no data.

**Solving average salary:** 70% water  
**Solid salary:** 30%  
**other details:** There are no further data.

## 10). stability and reactivity

### Stability:

Stable under ordinary conditions of use and storage. Becomes unstable upon exposure to air and converts into ammonium bicarbonate. This process liberates ammonia and carbon dioxide.

### Hazardous Decomposition Products:

Burning may produce ammonia, carbon monoxide, carbon dioxide, nitrogen oxides.

### Hazardous Polymerization:

Will not occur.

### Incompatibilities:

Sodium hypochlorate, acids and acid salts, iron salts, zinc, alkaloids, aluminum and calomel, sodium nitrate and nitrites. Corrosive to nickel, copper and other alloys.

### Conditions to Avoid:

Exposure to heat.

## 11). details on the toxicology

For Ammonium Carbonate, Oral rat LD50: 2150 mg/kg

Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Ammonium Carbonate (506-87-6)	No	No	None

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## 12). details on ecology

### General notes:

There are no data.  
The product was not tested.

## 13). indications for waste management

### Product (concentrate):

The corresponding legal local-and waste regulations must be observed. May not be together disposed with domestic garbage. Do not let it reach into the sewage system.

## 14). details on transport

### Transport/further details:

No dangerous goods according to the transport regulations  
(ADR/RID IMDG code, ICAO-TI/IATA-DGR)

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## 15). Regulations Identification

The product is classified and labeled according to EC guidelines

**Classification letter:**

**Danger identification:** harmful  
**Danger symbol:** Xn  
**R sentences:** 22 harmful if swallowed

## 16). other details

**Use:** Photographic developer

Further information:

These details refer merely on this above product and not needs to be valid, if this is occurred with another product or in an arbitrary process.

The information corresponds to our today's knowledge, it is correct and complete and with best conscience, given without a guarantee, though. It shall describe our product with a view to safety requirements and has therefore not the meaning to assure of certain qualities. The responsibility of the use of this product remains on the user whether the information is complete and suitable for his special use.

**ISSUED BY:** Wolfgang Moersch – Moersch-Photochemie  
++49 2233 943137 [info@moersch-photochemie.com](mailto:info@moersch-photochemie.com)

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