## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

| | |
|---|---|
| Product name | Organotin - Mix 8 (DIN EN ISO 17353:2004) |
| Product Number | 13970-W100ME5 |
| REACH No. | A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline. |

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

| | |
|---|---|
| Identified uses | specific analytics |

### 1.3 Details of the supplier of the safety data sheet

| | |
|---|---|
| Company | NEOCHEMA GmbH<br>Am Kümmerling 37a<br>55294 Bodenheim, |
| Telephone | +49 6135-8166 |
| Fax | +49 6135-8168 |
| E-mail address | info@neochema.com |

### 1.4 Emergency telephone number

| | |
|---|---|
| Emergency Phone # | +49 6135-8166<br>This number is only reachable during office hours (Mo - Fr, 08:00 AM - 4:00 PM CET). |

## SECTION 2: Hazards identification

### 2.1 Classification according to Regulation (EC) No 1272/2008

Flam. liq. (category 2), H225;
Acute tox. (oral, category 3), H301;
Acute tox. (dermal, category 3), H311;
Acute tox. (inhalation, category 3), H331;
STOT SE (category 1), H370;
Aquatic chronic (category 2), H411;

For the full text of the H-Statements mentioned in this Section, see Section 2.2.

### 2.2 Labelling according Regulation (EC) No 1272/2008

**Pictogram**

**Signal word** **Danger**

**Hazard statements**

H225 Highly flammable liquid and vapour.
H370 Causes damage to organs.
H411 Toxic to aquatic life with long-lasting effects.
H301 + H311 + H331 Toxic if swallowed, in contact with skin or inhaled.

**Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P262 Do not get in eyes, on skin, or on clothing.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301 + 310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P302 + P350 IF ON SKIN: Wash with plenty of water.
P304 + 340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P307 + P311 If exposed or concerned: Call a POISON CENTER/ doctor.
P370 + P378 In case of fire: Use carbondioxid, sand or extinguishing powder to extinguish.

**Supplemental Hazard Statements (EU)**

none

**2.3 Other hazards**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

**3.1 Substances**

This product is a mixture.

**3.2 Mixtures**

Ingredient: Methanol; CAS-No.: 67-56-1; EG-No.: 200-659-6; REACH-No.: 01-2119433307-44-XXXX; Clasification: H225, H301, H311, H331, H370; Flam. Liq 2; Acute Tox. 3; Acute Tox. 3; Acute Tox. 3; STOT SE 1; Concentration: >= 90 - <= 100 %

Ingredient: Di-n-butyltin dichloride; CAS-No.: 683-18-1; EG-No.: 211-670-0; REACH-No.: k.A.; Clasification: H301, h312, H314, H330, H341, H360, H373, H410; Acute Tox. 3; Skin Corr. 1; Acute Tox. 1/2; Muta. 2; Repr. 1; STOT RE 2; Aquatic Chronic 1; Concentration: < 0,1 %

Ingredient: Tri-n-butyltin chloride; CAS-No.: 1461-22-9; EG-No.: 215-958-7; REACH-No.: k.A.; Clasification: H301, H312, H315, H319, H372, H410; Acute Tox. 3; Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; STOT RE 1; Aquatic Chronic 1; Concentration: < 0,1 %

Ingredient: Tetra-n-butyltin; CAS-No.: 1461-25-2; EG-No.: 215-960-8; REACH-No.: k.A.; Clasification: H301, H312, H315, H319, H372, H410; Acute Tox. 3; Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; STOT RE 1; Aquatic Chronic 1; Concentration: < 0,1 %

Ingredient: Triphenyltin chloride; CAS-No.: 639-58-7; EG-No.: 211-358-4; REACH-No.: k.A.; Clasification: H301, H311, H315, H318, H331, H410; Acute Tox. 3; Acute Tox. 3; Skin Irrit. 2; Eye Dam. 1; Acute Tox. 3; Aquatic Chronic 1; Concentration: < 0,1 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

**4.1 Description of first aid measures**

**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

**If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**

Flush eyes with water as a precaution. Consult a physician.

**If swallowed**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician

**4.2 Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

**4.3 Indication of any immediate medical attention and special treatment needed**

No data available

## SECTION 5: Firefighting measures

**5.1 Extinguishing media**

**Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**

Carbon oxides

**5.3 Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

## SECTION 6: Accidental release measures

**6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

**6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**6.3 Methods and materials for containment and cleaning up**

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing or collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local regulations (see section 13).

**6.4 Reference to other sections**

For disposal see section 13.

## SECTION 7: Handling and storage

**7.1 Precautions for safe handling**

Avoid exposure. Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking.Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Storage class (TRGS 510): Flammable liquids.

**7.3 Specific end uses**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

## SECTION 8: Exposure controls/personal protection

**8.1 Control parameters**

Ingredient: Methanol; CAS-No.: 67-56-1; TWA: 200 ppm, 260 mg/m3; AGW: 100 ppm, 130 mg/m3
Ingredient: Di-n-butyltin dichloride; CAS-No.: 683-18-1; AGW: 0,0018 ppm, 0,009 mg/m³
Ingredient: Tri-n-butyltin chloride; CAS-No.: 1461-22-9; AGW: 0,0018 ppm, 0,009 mg/m3
Ingredient: Tetra-n-butyltin; CAS-No.: 1461-25-2; AGW: 0,0018 ppm, 0,009 mg/m3
Ingredient: Triphenyltin chloride; CAS-No.: 639-58-7; AGW: 0,0004 ppm, 0,002 mg/m3

**8.2 Exposure controls**

**Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Body Protection**

Impervious clothing, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## SECTION 9: Physical and chemical properties

**9.1 Information on basic physical and chemical properties**

Theses information refer to the main component and are literature values.

| | |
|---|---|
| **a) Appearance** | liquid |
| **b) Odour** | alcoholic |
| **c) Odour Threshold** | No data available |
| **d) pH** | No data available |
| **e) Melting point** | -98 °C |
| **f) Initial boiling point** | 64,7 °C |
| **g) Flash point** | 9,7 °C - closed cup |
| **h) Evaporation rate** | No data available |
| **i) Flammability** | No data available |
| **j) Explosive limits** | Lower explosion limit: 6 %(V)<br>Upper explosion limit: 36 %(V) |
| **k) Vapour pressure** | 130,3 hPa at 20,0 °C |
| **l) Vapour density** | 1,11 |
| **m) Relative density** | 0,79 g/cm3 |
| **n) Water solubility** | completely miscible |
| **o) Partition coefficient** | log Pow: -0,77 (n-Octanol/Water) |
| **p) Auto-ignition temperature** | 455,0 °C bei 1.013 hPa |
| **q) Decomposition temperature** | No data available |
| **r) Viscosity** | No data available |
| **s) Explosive properties** | No data available |
| **t) Oxidizing properties** | No data available |

**9.2 Other safety information**

No data available

## SECTION 10: Stability and reactivity

Theses information refer to the main component.

**10.1 Reactivity**

No data available

**10.2 Chemical stability**

Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**

No data available

**10.4 Conditions to avoid**

Heat, flames and sparks.

**10.5 Incompatible materials**

Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids

**10.6 Hazardous decomposition products**

In the event of fire: see section 5

## SECTION 11: Toxicological information

**11.1 Information on toxicological effects**

No data available for the product.

**Acute toxicity**

Ingredient: Methanol; CAS-No.: 67-56-1; LD(50) (oral, ATE): 100 mg/kg; (literature); LD(50) (dermal, ATE): 300 mg/kg; (literature); LD(50) (inhalation, ATE): 3 mg/L; (literature);

Ingredient: Di-n-butyltin dichloride; CAS-No.: 683-18-1; LD(50) (oral, rat): 50 mg/kg; (literature); LD(50) (dermal, ATE): 1100 mg/kg; (literature); LD(50) (inhalation, ATE): 0,5 mg/L; (literature);

Ingredient: Tri-n-butyltin chloride; CAS-No.: 1461-22-9; LD(50) (oral, rat): 101 mg/kg; (literature); LD(50) (dermal, ATE): 1100 mg/kg; (literature);

Ingredient: Tetra-n-butyltin; CAS-No.: 1461-25-2; LD(50) (oral, rat): 1268 mg/kg; (literature); LD(50) (dermal, ATE): 1100 mg/kg; (literature);

Ingredient: Triphenyltin chloride; CAS-No.: 639-58-7; LD(50) (oral, rat): 118 mg/kg; (literature); LD(50) (dermal, rabbit): 1000 mg/kg; (literature); LD(50) (inhalation, ATE): 3 mg/L; (literature);

ATE-Mix (oral): 100mg/kg
ATE-Mix (dermal): 300mg/kg
ATE-Mix (inhalation): 3mg/l

**Skin corrosion/irritation**
The mixture is not classified.
**Serious eye damage/eye irritation**
The mixture is not classified.
**Respiratory or skin sensitisation**
The mixture is not classified.
**Germ cell mutagenicity**
The mixture is not classified.
**Carcinogenicity**
The mixture is not classified.
**Reproductive toxicity**
The mixture is not classified.
**Specific target organ toxicity - single exposure**
The mixture is not classified.
**Specific target organ toxicity - repeated exposure**
The mixture causes damage to organs. The classification results from specific concentration limits.
**Aspiration hazard**
The mixture is not classified.

## SECTION 12: Ecological information

**12.1 Toxicity**
Ingredient: Di-n-butyltin dichloride; CAS-No.: 683-18-1; LC/EC(50) (Skeletonema costatum - 72 h): 0,04 mg/L; (literature); NOEC(50): No data available.
Ingredient: Tri-n-butyltin chloride; CAS-No.: 1461-22-9; LC/EC(50) (rainbow trout - 96 h): 0,011 mg/L; (literature); NOEC(50) (Phyllospora comosa - 96 h): 0,001 mg/L; (literature);
Ingredient: Tetra-n-butyltin; CAS-No.: 1461-25-2; LC/EC(50) (large water flea - 24 h): 0,002 mg/L; (literature); NOEC(50): No data available.
Ingredient: Triphenyltin chloride; CAS-No.: 639-58-7; LC/EC(50) (large water flea - 48 h): 0,009 mg/L; (literature); NOEC(50): No data available.

**12.2 Persistence and degradability**
No data available

**12.3 Bioaccumulative potential**
No data available

**12.4 Mobility in soil**
No data available

**12.5 Results of PBT and vPvB assessment**
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**12.6 Other adverse effects**
No data available

## SECTION 13: Disposal considerations

**13.1 Waste treatment methods**
**Product**
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.
**Contaminated packaging**
Dispose of as unused product.

## SECTION 14: Transport information

**14.1 UN number**
ADR/RID: 1230 IMDG: 1230 IATA: 1230

**14.2 UN proper shipping name**

ADR/RID: METHANOL
IMDG: METHANOL
IATA: Methanol

**14.3 Transport hazard classes**

ADR/RID: 3 (6.1) IMDG: 3 (6.1) IATA: 3 (6.1)

**14.4 Packaging group**

ADR/RID: II IMDG: II IATA: II

**14.5 Environmental hazards**

ADR/RID: no IMDG Marine pollutant: no IATA: no

**14.6 Special precautions for user**

No data available

## SECTION 15: Regulatory information

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**15.2 Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out.

## SECTION 16: Other information

Further information

 The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Neochema GmbH shall not be held liable for any damage resulting from handling or from contact with the above product. See www.neochema.com for additional terms and conditions of sale.

**Full text of H-Statements referred to under section 3.**

H225 Highly flammable liquid and vapour.
H301 Toxic if swallowed.
H311 Toxic in contact with skin.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H331 Toxic if inhaled.
H341 Suspected of causing genetic defects.
H360 May damage fertility or the unborn child.
H370 Causes damage to organs.
H372 Causes damage to organs through prolonged or repeated exposure.
H373 May cause damage to organs through prolonged or repeated exposure.
H410 Very toxic to aquatic life with long-lasting effects.