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-W1000ME10
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 Uwe-Zeidler-Ring 10 55294 Bodenheim, Germany
Telephone	+49 6135-933199 0
Fax	+49 6135-933199 19
E-mail address	info@neochema.com

1.4 Emergency telephone number

Emergency Phone #	+49 6135-933199 0 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 acute (category 1), H400;
Aquatic chronic (category 1), H410;

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.
H410 Very 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: n-Butyltin trichloride; CAS-No.: 1118-46-3; EG-No.: 214-263-6; REACH-No.: k.A.; Clasification: H314, H332, H335, H410; Skin Corr. 1; Acute Tox. 4; STOT SE 3; Aquatic Chronic 1; Concentration: >= 0,1 - < 1 %

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 - < 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 - < 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 - < 1 %

Ingredient: Di-n-octyltin dichloride; CAS-No.: 3542-36-7; EG-No.: 222-583-2; REACH-No.: k.A.; Clasification: H331, H372, H412; Acute Tox. 3; STOT RE 1; Aquatic Chronic 3; Concentration: >= 0,1 - < 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 - < 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: n-Butyltin trichloride; CAS-No.: 1118-46-3; AGW: 0,0018 ppm, 0,009 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: Di-n-octyltin dichloride; CAS-No.: 3542-36-7; AGW: 0,002 ppm, 0,01 mg/m³, MAK: 0,1E mg/m³ als Sn berechnet
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) 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: n-Butyltin trichloride; CAS-No.: 1118-46-3; LD(50) (inhalation, ATE): 11 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: Di-n-octyltin dichloride; CAS-No.: 3542-36-7; LD(50) (inhalation, ATE): 3 mg/L; (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): 101mg/kg
ATE-Mix (dermal): 303mg/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: n-Butyltin trichloride; CAS-No.: 1118-46-3; LC/EC(50) (Scenedesmus subspicatus - 72 h): 0,31 mg/L; (literature); NOEC(50): No data available.
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: Di-n-octyltin dichloride; CAS-No.: 3542-36-7; LC/EC(50): No data available. 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.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
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.
H412 Harmful to aquatic life with long-lasting effects.