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Safety data sheet according to 1907/2006/EC, Article 31

Printing date 17.10.2013 Version number 2 Revision: 17.10.2013

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

· Date of compilation: 20.04.2004

· 1.1 Product identifier

· Trade name: Melpool 90/20, 90/200

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

No further relevant information available.

· Application of the substance / the preparation: Disinfectant

· 1.3 Details of the supplier of the safety data sheet

· Manufacturer / Supplier:

Melspring International B.V. Arnhemsestraatweg 8

NL-6881 NG Velp

- · E-mail address of the competent person responsible for the Safety Data Sheet: sdb@csb-online.de
- · Informing department: Sales / Technics
- · 1.4 Emergency telephone number: As above or next toxicological information centre.

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Eye Irrit. 2 H319 Causes serious eye irritation. STOT SE 3 H335 May cause respiratory irritation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Xn; Harmful

R22: Harmful if swallowed.



Xi; Irritant

R36/37: Irritating to eyes and respiratory system.



O; Oxidising

R8: Contact with combustible material may cause fire.



N; Dangerous for the environment

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R31: Contact with acids liberates toxic gas.

- · Information concerning particular hazards for human and environment: void
- · Classification system:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

The classification is according to the latest editions of the EU-lists, and extended by company and literature data

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- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms





GHS07 GHS09

- · Signal word Warning
- · Hazard-determining components of labelling:

Trichloro-1,3,5-triazinetrione

· Hazard statements

H302 Harmful if swallowed.

H319 Causes serious eve irritation.

H335 May cause respiratory irritation.

H410 Very toxic to aquatic life with long lasting effects.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children. P103 Read label before use.

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P273 Avoid release to the environment.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P309+P311 IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

breathing.

· Additional information:

EUH031 Contact with acids liberates toxic gas.

Warning! Do not use together with other products. May release dangerous gases (chlorine).

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.1 Chemical characterization: Substances
- · CAS No. Designation:

87-90-1 symclosene

- Identification number(s):
- · EC number: 201-782-8
- · Index number: 613-031-00-5
- · 3.2 Chemical characterization: Mixtures
- **Description:** Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components: Void
- ·SVHC

10043-35-3 Boric acid

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· Additional information: For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- General information:

Immediately remove any clothing contaminated by the product.

Symptoms of poisoning may occur after several hours. Medical observation for at least 48 hours after the accident is recommended.

- · After inhalation: Supply fresh air; consult doctor in case of symptoms.
- · After skin contact:

Wash with soap and water.

If skin irritation continues, consult a doctor.

- · After eye contact: If skin irritation continues, consult a doctor.
- · After swallowing:

Call a doctor immediately.

Do not induce vomiting!

Rinse out mouth and then drink plenty of water.

- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- · 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents Only use plenty of water.
- · For safety reasons unsuitable extinguishing agents All but water.
- · 5.2 Special hazards arising from the substance or mixture

Chlorine

Chlorine dioxide (ClO₂)

Formation of poisonous gases during heating or in fires.

Nitrogen oxides (NOx)

Hydrogen chloride (HCl)

Carbon monoxide (CO) and Carbon dioxide (CO₂)

Oxidising by development of oxygen

- · 5.3 Advice for firefighters
- · Protective equipment: Wear self-contained breathing apparatus.
- · Additional information Collect contaminated fire fighting water separately. It must not enter drains.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Wear protective clothing and keep away unprotected persons.

Keep people at a distance and stay on the windward side.

Avoid contact with skin and eyes.

Do not breathe dust.

· 6.2 Environmental precautions:

Damp down dust with water spray jet.

Do not allow to enter drainage system, surface or ground water.

Inform respective authorities in case product reaches water or sewage system.

· 6.3 Methods and material for containment and cleaning up:

Ensure adequate ventilation.

Collect mechanically.

Dispose of the material collected according to regulations.

Avoid mixing with acids/materials containing acids under any circumstances.

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· 6.4 Reference to other sections

See Section 8 for information on personal protection equipment.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Do not replace residual quantities in storage containers.

Any deposit of dust which cannot be avoided must be removed regularly.

Do not breathe dust.

Avoid mixing with acids/materials containing acids under any circumstances.

· Information about protection against explosions and fires:

Substance/product can reduce the ignition temperature of flammable substances.

Keep breathing equipment ready.

- · 7.2 Conditions for safe storage, including any incompatibilities
- Storage
- Requirements to be met by storerooms and containers:

Observe all local and national regulations for storage of water polluting products.

· Information about storage in one common storage facility:

Store away from flammable substances.

Store away from reducing agents.

Do not store together with acids.

· Further information about storage conditions:

Protect from humidity and keep away from water.

Store in cool, dry conditions in well sealed containers.

· 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · 8.1 Control parameters
- · Components with critical values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· Additional Occupational Exposure Limit Values for possible hazards during processing:

7782-50-5 Chlorine

OES (Great Britain) Short-term value: 2.9 mg/m³, 1 ppm Long-term value: 1.5 mg/m³, 0.5 ppm

- · Additional information: The lists that were valid during the compilation were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures

Keep away from foodstuffs, beverages and food.

Instantly remove any contaminated garments.

Avoid contact with the eyes and skin.

Use skin protection cream for preventive skin protection.

Wash hands during breaks and at the end of the work.

Breathing equipment:

 ${\it If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.}$

Use breathing protection in case of dust formation.

Dust proof mask - particle filter mask

Protection of hands:

Protective gloves

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To avoid skin problems reduce the wearing of gloves to the required minimum.

Check the permeability prior to each renewed use of the glove.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

· Material of gloves

Poly vinyl chloride - PVC

Rubber gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- · Eye protection: Tightly sealed safety glasses
- · Body protection: Protective work clothing

General Information Appearance: Form: Colour:		
Form:		
	1. 1	
	solid in various forms	
Cotour: Smell:	white chlorine-like	
Odour threshold:	no data available	
pH-value:	Not applicable.	
Change in condition		
Melting point/Melting range:	225 - 240 °C	
Boiling point/Boiling range:	not determined	
Flash point:	not applicable	
Inflammability (solid, gaseous)	Contact with combustible material may cause fire.	
Ignition temperature:	no data available	
Decomposition temperature:	no data available	
Self-inflammability:	no data available	
Danger of explosion:	Product is not explosive.	
Critical values for explosion:		
Lower:	no data available	
Upper:	no data available	
Oxidizing properties	oxidising	
Vapor pressure:	Not applicable.	
Density at 20 °C:	$\sim 2.5 \text{ g/cm}^3$	
Relative density	no data available	
Vapour density $(AIR = 1)$:	no data available	
Evaporation rate	no data available	
Solubility in / Miscibility with		
Water at 25 °C:	12 g/l	
Partition coefficient (n-octanol/wate	r): no data available	
Viscosity:		
dynamic:	not applicable	
	not applicable not applicable	

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· 9.2 Other information

No further relevant information available.

SECTION 10: Stability and reactivity

- · 10.1 Reactivity see 10.3
- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:

Sources of ignition

Heat

Humidity

10.3 Possibility of hazardous reactions

Reacts with flammable substances

Reacts with fabric soaked in the product (e.g. cleaning wool)

Acts as an oxidizing agent on organic materials such as wood, paper and fats.

Explosive reaction with water

- · 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials:

Acids

Reducing agents

Flammable materials

Organic substances

· 10.6 Hazardous decomposition products:

Nitrous vitriol gases

Chlorine

Nitrogen oxides (NOx)

Hydrogen chloride (HCl)

Carbon monoxide (CO) and Carbon dioxide (CO2)

Nitrogen trichloride (high explosive)

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity:

· LD/LC50 values that are relevant for classification:

87-90-1 Trichloro-1,3,5-triazinetrione

Oral	LD50	490 mg/kg (rat)
	LDLo	3570 mg/kg (human)
	LD50	> 2000 mg/kg (rabbit)
Inhalative	LC50/1 h	~2.16 mg/l (rat)
	LC50/4 h	~0.54 mg/l (rat)

- · Primary irritant effect:
- · on the skin: Contact with humidity may cause corrosive or irritant effects.
- · on the eye:

Contact with humidity may cause corrosive or irritant effects.

Causes serious eye irritation.

- · Subacute to chronic toxicity: no data available
- · Sensitisation No sensitizing effect known.
- · Repeated dose toxicity no data available
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

According to present knowledge no CMR-effects known.

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SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

87-90-1 Trichloro-1,3,5-triazinetrione

LC50/48 h | 0.21 mg/l (water flea (daphnia magna)) LC50/96 h | 0.30 mg/l (bluegill (lepomis macrochirus))

0.32 mg/l (salmo gairdneri)

- · 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark: Very toxic for fish and aquatic organisms.
- · Additional ecological information:
- · General notes:

The material is harmful for the environment.

Very toxic for aquatic organisms

Water hazard class 2 (Self-assessment): hazardous for water

- · 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- $\cdot \textit{Recommendation } \textit{Disposal must be made according to official regulations}.$
- · Waste disposal key number: According to local/national regulations.
- · European waste catalogue:

Waste disposal key numbers from EWC have to be assigned depending on origin and processing.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

14.1 UN-Number ADR, IMDG, IATA	UN3077
14.2 UN proper shipping name	
ADR	UN3077 ENVIRONMENTALLY HAZARDOUS
	SUBSTANCE, SOLID, N.O.S.
	(TRICHLOROISOCYANURIC ACID)
· IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
	SOLID, N.O.S. (TRICHLOROISOCYANURIC ACID),
	MARINE POLLUTANT
IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
	SOLID, N.O.S. (TRICHLOROISOCYANURIC ACID)

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(Contd. of page 7) · 14.3 Transport hazard class(es) $\cdot ADR$ · Class 9 (M7) Miscellaneous dangerous substances and articles. · Label IMDG, IATA · Class 9 Miscellaneous dangerous substances and articles. · Label · 14.4 Packing group · ADR, IMDG, IATA III· 14.5 Environmental hazards: · Marine pollutant: Symbol (fish and tree) · Special marking (ADR): Symbol (fish and tree) · Special marking (IATA): Symbol (fish and tree) Warning: Miscellaneous dangerous substances and · 14.6 Special precautions for user articles. 90 · Kemler Number: · EMS Number: F-A,S-F· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. · Transport/Additional information: Test for oxidizing solids: negative $\cdot ADR$ · Excepted quantities (EQ): E1· Limited quantities (LQ): 5 kg · Transport category: 3 · Tunnel restriction code: Е · UN "Model Regulation": UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (TRICHLOROISOCYANURIC ACID), 9, III

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · National regulations
- · Information about limitation of use:

Employment restrictions concerning pregnant and lactating women must be observed. Employment restrictions concerning young persons must be observed.

Decree to be applied in case of technical fault:

Quantity limits according to "EC Seveso directive" should be observed.

· Water hazard class: Water hazard class 2 (Self-assessment): hazardous for water

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· Other regulations, limitations and prohibitive regulations

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Phone: +49 - 2151 - 652086-0

Fax: +49 - 2151 - 652086-9

Other regulations, timulations and promotive regulations

· Substances of very high concern (SVHC) according to REACH, Article 57

10043-35-3 Boric acid

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Reasons for changes:

The Material Safety Data Sheet has been revised. Changes in the respective chapters are characterized in the left side edge by *.

Department issuing MSDS:

C.S.B. GmbH Düsseldorfer Str. 113 47809 Krefeld / Germany

· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organization

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

 $LC50: Lethal\ concentration,\ 50\ percent$

LD50: Lethal dose, 50 percent

- · Sources: These data are based on information submitted by pre-suppliers.
- · * Data compared to the previous version altered.

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