

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:** 17.02.2005
- **1.1 Product identifier**
- **Trade name:** Melpool 55/G
- **EC number:**
220-767-7
- **Index number:**
613-030-01-7
- **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:** Various
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer / Supplier:**
Melspring International B.V.
Arnhemsestraatweg 8
NL-6881 NG Velp
Phone: +31 (0) 26 - 38420 - 00
Fax: +31 (0) 26 - 38420 - 11
- **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.



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

- **2.2 Label elements**

- **Labelling according to Regulation (EC) No 1272/2008**

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

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· Hazard pictograms

GHS07 GHS09

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

Sodium dichloroisocyanurate, dihydrate

· Hazard statements

H302 Harmful if swallowed.

H319 Causes serious eye 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.

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

P273 Avoid release to the environment.

P261 Avoid breathing dust.

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

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

· 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:**

Sodium dichloroisocyanurate, dihydrate

· Identification number(s):**· EC number:** 220-767-7**· Index number:** 613-030-01-7**· Dangerous components:**

Sodium dichloroisocyanurate, dihydrate

 Xn R22;
 Xi R36/37;
 N R50/53
 R31

Aquatic Acute 1, H400;
 Aquatic Chronic 1, H410;
 Acute Tox. 4, H302;
 Eye Irrit. 2, H319;
 STOT SE 3, H335

50-100%

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· **Ingredients according to Regulation (EC) No 648/2004:**

chlorine-based bleaching agents

≥ 30%

SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· **General information:**

Remove contaminated clothing.

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:**

Rinse opened eye for several minutes under running water.

Remove contact lenses, if present and easy to do.

Use eye protection.

Call a doctor immediately.

· **After swallowing:**

Do not induce vomiting!

Seek immediate medical advice.

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**

Under certain fire conditions, traces of other toxic gases cannot be excluded.

Formation of poisonous gases during heating or in fires.

Nitrogen oxides (NO_x)

Hydrogen chloride (HCl)

Carbon monoxide (CO) and Carbon dioxide (CO₂)

· **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**

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

Do not breathe vapour.

Put on breathing apparatus.

Ensure adequate ventilation.

Avoid contact with eyes.

· **6.2 Environmental precautions:**

Do not allow product to reach sewage system or water bodies.

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

· **6.3 Methods and material for containment and cleaning up:**

Ensure adequate ventilation.

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- Collect mechanically.
- Send for recovery or disposal in suitable containers.
- Dispose of the material collected according to regulations.
- **6.4 Reference to other sections**
- See Section 7 for information on safe handling
- See Section 8 for information on personal protection equipment.
- See Section 13 for information on disposal.

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.
- Avoid breathing vapours.
- Do not breathe dust.
- Avoid mixing with acids/materials containing acids under any circumstances.
- Avoid contact with skin and eyes.
- Make sure that all applicable workplace limits are observed.
- **Information about protection against explosions and fires:** 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:** Do not store together with acids.
- **Further information about storage conditions:**
- Store container in a well ventilated position.
- 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:**
- Observe all workplace limits for dust.

Sodium dichloroisocyanurate, dihydrate

WEL (Great Britain)	Short-term value: 0.07 mg/m ³
	Long-term value: 0.02 mg/m ³
	Sen; as -NCO

- **Additional Occupational Exposure Limit Values for possible hazards during processing:**

7782-50-5 Chlorine

WEL (Great Britain)	Short-term value: 1.5 mg/m ³ , 0.5 ppm
IOELV (European Union)	Short-term value: 1.5 mg/m ³ , 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.
- Wash hands during breaks and at the end of the work.
- Use skin protection cream for preventive skin protection.
- Do not eat, drink or smoke while working.

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Breathing equipment:

Dust proof mask - particle filter mask

In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.

Use breathing protection in case of dust formation.

Protection of hands:

Protective gloves

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.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of 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.

Penetration time of glove materialPenetration time: ≥ 8 hours

Protective gloves should be replaced at first signs of wear.

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Tightly sealed safety glasses**Body protection:**

Protective work clothing

Body protection must be chosen depending on activity and possible exposure.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties**General Information****Appearance:**

Form:	Granulate
Colour:	white
Smell:	like chlorine
Odour threshold:	not determined

pH-value: Not applicable.**Change in condition**

Melting point/Melting range:	250 °C
Boiling point/Boiling range:	not determined

Flash point: not applicable**Inflammability (solid, gaseous)** Product is not inflammable.**Ignition temperature:** 250 °C (DIN 51794)**Decomposition temperature:** Not determined.**Self-inflammability:** Not determined.**Danger of explosion:** Product is not explosive.**Critical values for explosion:**

Lower:	Not determined.
Upper:	Not determined.

Oxidizing properties oxidising**Vapor pressure:** Not applicable.

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· Density:	<i>not determined</i>
· Bulk density at 20 °C:	<i>1000 kg/m³</i>
· Relative density	<i>Not determined.</i>
· Vapour density (AIR = 1):	<i>Not applicable.</i>
· Evaporation rate	<i>Not applicable.</i>
· Solubility in / Miscibility with Water at 25 °C:	<i>250 g/l</i>
· Partition coefficient (n-octanol/water):	<i>Not determined.</i>
· Viscosity:	
dynamic:	<i>Not applicable.</i>
kinematic:	<i>Not applicable.</i>
· 9.2 Other information	<i>No further relevant information available.</i>

SECTION 10: Stability and reactivity

- **10.1 Reactivity** see 10.3
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** *No decomposition if used according to specifications.*
- **10.3 Possibility of hazardous reactions**
Reacts with strong acids and oxidizing agents
Violent reaction with sodium and calcium hypochlorite:
Form highly explosive nitrogen trichloride.
- **10.4 Conditions to avoid** *No further relevant information available.*
- **10.5 Incompatible materials:**
Alkaline materials
Strong acids
Reducing agents
Strong oxidizing agents
- **10.6 Hazardous decomposition products:**
Nitrogen oxides (NO_x)
Hydrogen chloride (HCl)
Poisonous gases/vapours
Carbon monoxide (CO) and Carbon dioxide (CO₂)

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**

Sodium dichloroisocyanurate, dihydrate

Oral	LD50	1400 mg/kg (rat)
	LDLo	3570 mg/kg (human)
Dermal	LD50	> 5000 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:**
Longer lasting and/or repeated skin contact may cause irritation.
Dust particles may mechanically irritate the skin.
- **on the eye:**
Irritant effect
Dust particles may mechanically irritate the eye.
- **Subacute to chronic toxicity:** *no data available*

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- **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.

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

Sodium dichloroisocyanurate, dihydrate

EC50/48 h 0.28 mg/l (daphnia) (ECOTOX Database)

LC50/96 h 0.25 mg/l (rainbow trout (oncorhynchus mykiss)) (ECOTOX Database)

- **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:** Water hazard class 2 (Assessment by list): 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**
- **Recommendation** 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:**
Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.
Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

SECTION 14: Transport information

· 14.1 UN-Number

· ADR, IMDG, IATA

UN3077

· 14.2 UN proper shipping name

· ADR

UN3077 ENVIRONMENTALLY HAZARDOUS
SUBSTANCE, SOLID, N.O.S. (Sodium
dichloroisocyanurate, dihydrate)

· **IMDG** ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
SOLID, N.O.S. (Sodium dichloroisocyanurate, dihydrate),
MARINE POLLUTANT

· IATA

ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
SOLID, N.O.S. (Sodium dichloroisocyanurate, dihydrate)

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· **14.3 Transport hazard class(es)**· **ADR**

· **Class** 9 (M7) Miscellaneous dangerous substances and articles.
 · **Label** 9

· **IMDG, IATA**

· **Class** 9 Miscellaneous dangerous substances and articles.
 · **Label** 9

· **14.4 Packing group**· **ADR, IMDG, IATA**

III

· **14.5 Environmental hazards:**· **Marine pollutant:**

YES

Symbol (fish and tree)

· **Special marking (ADR):**

Symbol (fish and tree)

· **Special marking (IATA):**

Symbol (fish and tree)

· **14.6 Special precautions for user**

Warning: Miscellaneous dangerous substances and articles.

· **Kemler Number:**

90

· **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:**

Transport by post may be prohibited or restricted.

· **ADR**· **Excepted quantities (EQ):**

E1

· **Limited quantities (LQ):**

5 kg

· **Transport category:**

3

· **Tunnel restriction code:**

E

· **UN "Model Regulation":**

UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Sodium dichloroisocyanurate, dihydrate), 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 (Assessment by list): hazardous for water

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· **Other regulations, limitations and prohibitive regulations**

The substance / components are listed in:

EINECS / ELINCS (Europa)

· **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 *.

Changes in classification and labelling

· **Relevant phrases**

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

R22 Harmful if swallowed.

R31 Contact with acids liberates toxic gas.

R36/37 Irritating to eyes and respiratory system.

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

· **Department issuing MSDS:**

C.S.B. GmbH

Düsseldorfer Str. 113

47809 Krefeld / Germany

Phone: +49 - 2151 - 652086-0

Fax: +49 - 2151 - 652086-9

· **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.**