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

Printing date 09.02.2012 Version number 2 Revision: 09.02.2012

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

· Date of issue: 05.01.2005

· Product identifier

· Trade name: Melpool PAC

- · Relevant identified uses of the substance or mixture and uses advised against
- · Application of the substance / the preparation: Chemicals for various applications
- · 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

Sales / Technics

· Emergency telephone number:

National (Dutch) Toxic Information Center

Phone: ++31-302748888

As above or next toxicological information centre

2 Hazards identification

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



GHS05 corrosion

Skin Corr. 1C H314 Causes severe skin burns and eye damage.



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

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



Xi; Irritant

R36/38: Irritating to eyes and skin.

- · 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.

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

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

· Hazard pictograms



GHS05

- · Signal word Danger
- · Hazard statements

H314 Causes severe skin burns and eye damage.

· Precautionary statements

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

P102 Keep out of reach of children.

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P103 Read label before use.

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

P264 Wash thoroughly after handling.

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.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

· Other hazards

· Results of PBT and vPvB assessment

PBT: Not applicable.vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description: Aqueous solution

· Dangerous components:

CAS: 39290-78-3 Aluminum chloride hydroxide sulfate

50-100%

EINECS: 254-400-7

Xi R36/38

(1) Skin Irrit. 2, H315; Eye Irrit. 2, H319

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

4 First aid measures

- · Description of first aid measures
- · General information: Remove contaminated clothing.
- · After inhalation: In case of unconsciousness bring patient into stable side position for transport.
- · After skin contact:

Instantly wash with water and soap and rinse thoroughly.

Immediate medical treatment necessary. Failure to treat burns can prevent wounds from healing.

· After eye contact:

Remove contact lenses, if present and easy to do. Continue rinsing.

Rinse opened eye for several minutes under running water.

Use eye protection.

Call a doctor immediately.

· After swallowing:

Do not induce vomiting!

Rinse out mouth and then drink plenty of water.

In case of persistent symptoms consult doctor.

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

No further relevant information available.

5 Firefighting measures

- · Extinguishing media
- · Suitable extinguishing agents

Carbon dioxide (CO₂), extinguishing powder or water spray/fog. Fight larger fires with water spray/fog or alcohol-resistant foam.

- For safety reasons unsuitable extinguishing agents Water with a full water jet.
- · Special hazards arising from the substance or mixture

Can be released in case of fire:

Hydrogen chloride (HCl)

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Sulphur oxides (SOx)

Carbon monoxide (CO) and Carbon dioxide (CO₂)

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

· Advice for firefighters

· Protective equipment: Wear self-contained breathing apparatus.

· Additional information

Use large quantities of foam as it is partially destroyed by the product.

Cool endangered containers with water spray jet.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

· 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 vapours.

Use breathing protection against the effects of fumes/dust/aerosol.

· Environmental precautions:

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

Dilute with much water.

Prevent material from reaching sewage system, holes and cellars.

· Methods and material for containment and cleaning up:

Ensure adequate ventilation.

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Send for recovery or disposal in suitable containers.

Dispose of the material collected according to regulations.

· Reference to other sections

See Section 8 for information on personal protection equipment.

7 Handling and storage

- · Handling
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Keep away from heat and direct sunlight.

Open and handle container with care.

Prevent formation of aerosols.

Do not inhale vapours/aerosols.

Avoid contact with skin and eyes.

- · Information about protection against explosions and fires: No special measures required.
- · 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.

Provide acid-resistant floor.

· Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from acid-sensitive and chloride-sensitive substances.

· Further information about storage conditions:

Store in cool, dry conditions in well sealed containers.

Caution when reopening containers with broken seal.

Store container in a well ventilated position.

Recommended storage temperature: 0 - 30°C

Protect from frost.

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

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · 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 information: The lists that were valid during the compilation were used as basis.
- · Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures

Keep away from foodstuffs, beverages and food.

Instantly remove any contaminated garments.

Do not eat, drink or smoke while working.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

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

Use skin protection cream for preventive skin protection.

· Breathing equipment:

Use breathing protection when aerosol or mist is formed.

If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.

· 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

Neoprene gloves

Recommended thickness of the material: ≥0.75 mm

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

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:

Use protective suit.

Protective clothing should be selected specifically for the working place.

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· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: liquid Colour: clear

slightly cloudy

· Smell: odourless

• pH-value at 20°C: 2 - 3

· Change in condition

Boiling point/Boiling range: > 100°C **Solidification point:** -10 - -12°C

· Flash point: not applicable

· Self-inflammability: Product is not selfigniting.

• Danger of explosion: Product is not explosive.

· Vapor pressure at 20°C: ~ 22 hPa

• **Density at 20°C:** 1.2 - 1.3 g/cm³

· Solubility in / Miscibility with

Water: fully miscible

· Viscosity:

dynamic at 20°C: 20 mPas (Brookfield/LVT)

· Other information No further relevant information available.

10 Stability and reactivity

- · Reactivity
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials:

Alkaline materials

Strong oxidizing agents

· Hazardous decomposition products:

Hydrogen chloride (HCl)

Sulphur oxides (SOx)

Carbon monoxide (CO) and Carbon dioxide (CO₂)

11 Toxicological information

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

Oral | *LD50* | > 5000 mg/kg (rat)

- · Primary irritant effect:
- · on the skin: Irritant for skin and mucous membranes.
- · on the eye: Irritant effect
- · Sensitization: No sensitizing effect known.

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· Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version: Corrosive

12 Ecological information

- · Toxicity
- · Aquatic toxicity:

LC0/48 h | 750 mg/l (leuciscus idus) (DIN 38412 L15/OECD 203)

- · Persistence and degradability No further relevant information available.
- · Degree of elimination: no data available
- · Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · According to recipe contains the following heavy metals and compounds according to EC guideline NO. 76/464 EC:

The product does not contain heavy metals.

- · General notes: Water hazard class 1 (Self-assessment): slightly hazardous for water
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · **vPvB**: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · 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: Disposal must be made according to official regulations.
- · Recommended cleaning agent: Water, if necessary with cleaning agent.

· UN-Number	
· ADR, IMDG, IATA	UN3264
· UN proper shipping name	
$\cdot ADR$	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S
	(ALUMINIUMHYDROXIDE CHLORIDE SULFATE)
· IMDG, IATA	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
	(ALUMINIUMHYDROXIDE CHLORIDE SULFATE)

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• Transport hazard class(es)

• ADR

3

· Class 8 (C1) Corrosive substances.

· Label 8

· IMDG, IATA



· Class 8 Corrosive substances.

• *Label* 8

· Packing group

· ADR, IMDG, IATA III

· Special precautions for user Warning: Corrosive substances.

· Kemler Number: 80

· EMS Number: F-A,S-B

· 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.

 \cdot ADR

Excepted quantities (EQ):
Limited quantities (LQ):
Transport category:
Tunnel restriction code:

• UN "Model Regulation": UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (ALUMINIUMHYDROXIDE CHLORIDE SULFATE), 8, III

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Labelling according to Regulation (EC) No 1272/2008

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

· Hazard pictograms



GHS05

- · Signal word Danger
- · Hazard statements

H314 Causes severe skin burns and eye damage.

· 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.

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Trade name: Melpool PAC

P264 Wash thoroughly after handling.

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.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

· National regulations

- · Information about limitation of use: Employment restrictions concerning young persons must be observed.
- · Decree to be applied in case of technical fault: Directive 96/82/EC does not apply.
- · Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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 *.

· Relevant phrases

The(se) R- resp. H-phrase(s) are those of the ingredient(s) and do(es) not necessarily represent the classification of the preparation.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

R36/38 Irritating to eyes and skin.

· Department issuing MSDS:

C.S.B. GmbH Phone: +49 - 2151 - 652086-0 Parkstraße 29 Fax: +49 - 2151 - 652086-9

 $D ext{-}47829\ Krefeld$

Germany

· Abbreviations and acronyms:

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

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

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

· Sources: These data are based on information submitted by pre-suppliers.

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