Safety Data Sheet
acc. to OSHA HCS

Printing date 04/01/2015 Reviewed on 04/01/2015

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1 Identification
· **Product identifier**

· **Trade name:** **HMK S234 Stain Protection - Extra**
· **Relevant identified uses of the substance or mixture and uses advised against** No further relevant information available.
· **Application of the substance / the mixture** Stone Care Product

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
MÖLLER-CHEMIE Steinpflegemittel GmbH
Ziegeltalstrasse 2
93346 IHRLERSTEIN - Germany
Tel: 0 049 (0)9441 176 940

Distributor:

ACI International
3162 Pembroke Road
Hallandale, FL 33009
USA
Tel: (954) 964-1658
Fax: (954) 964-9277

· **Information department:** Management, E-Mail: info@moellerstonecare.eu
· **Emergency telephone number:**
24 Hours Emergency
Telephone Number: (800) 535-5053

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2 Hazard(s) identification
· **Classification of the substance or mixture**


GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapour.


GHS08 Health hazard

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.


GHS07

Eye Irrit. 2A H319 Causes serious eye irritation.
STOT SE 3 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

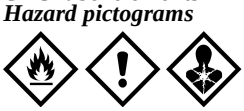
· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

Harmful
Harmful: may cause lung damage if swallowed.


Irritant
Irritating to eyes.


Dangerous for the environment
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Flammable. Vapours may cause drowsiness and dizziness.
· **Information concerning particular hazards for human and environment:**
The product has to be labeled due to the calculation procedure of international guidelines.
Has a narcotizing effect.
· **Classification system:**
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

· **Label elements**
· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**


GHS02 GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
Kohlenwasserstoffe, C9-C12, n-Alkane, iso-Alkane, cyclisch, Aromaten (2-25%)
4-hydroxy-4-methylpentan-2-one
ethyl acetate
Acrylat/Styrol Copolymer Dispersion ca. 42% in Wasser

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· **Hazard statements**
H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.
H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.
H304 May be fatal if swallowed and enters airways.
· **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.
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.
· **Classification system:**
· **NFPA ratings (scale 0 - 4)**
Health = 1
Fire = 2
Reactivity = 0
· **HMIS-ratings (scale 0 - 4)**
Health = 1
Fire = 2
Reactivity = 0
· **Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

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3 Composition/information on ingredients
· **Chemical characterization: Mixtures**
· **Description:** Mixture: consisting of the following components.
· **Dangerous components:**

Reg.nr.: 01-2119458049-33-xxxx	Kohlenwasserstoffe, C9-C12, n-Alkane, iso-Alkane, cyclisch, Aromaten (2-25%)	<70.0%
CAS: 123-42-2	4-hydroxy-4-methylpentan-2-one	<25.0%
Reg.nr.: 01-2119473975-21-0000		
CAS: 141-78-6	ethyl acetate	<10.0%
Reg.nr.: 01-2119475103-46-0000		
CAS: 64741-65-7	Naphtha (petroleum), heavy alkylate	< 5.0%

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4 First-aid measures
· **Description of first aid measures**
· **After inhalation:** Supply fresh air; consult doctor in case of complaints.
· **After skin contact:** If skin irritation continues, consult a doctor.
· **After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
· **After swallowing:** If symptoms persist 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.

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5 Fire-fighting measures
· **Extinguishing media**
· **Suitable extinguishing agents:** CO2, sand, extinguishing powder. Do not use water.
· **For safety reasons unsuitable extinguishing agents:** Water with full jet
· **Special hazards arising from the substance or mixture** No further relevant information available.
· **Advice for firefighters**
· **Protective equipment:** No special measures required.

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6 Accidental release measures
· **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
· **Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
· **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
· **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

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7 Handling and storage

· **Handling:**
· **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
· **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect from heat.
Protect against electrostatic charges.

· **Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** No special requirements.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:**
Keep receptacle tightly sealed.
Protect from heat and direct sunlight.
· **Specific end use(s)** No further relevant information available.

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8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Control parameters**
· **Components with limit values that require monitoring at the workplace:**

123-42-2 4-hydroxy-4-methylpentan-2-one
PEL Long-term value: 240 mg/m³, 50 ppm
REL Long-term value: 240 mg/m³, 50 ppm
TLV Long-term value: 238 mg/m³, 50 ppm
141-78-6 ethyl acetate
PEL Long-term value: 1400 mg/m³, 400 ppm
REL Long-term value: 1400 mg/m³, 400 ppm
TLV Long-term value: 1440 mg/m³, 400 ppm
· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
· **Breathing equipment:**
Filter A/P2
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
· **Protection of hands:**
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**
Fluorocarbon rubber (Viton)
Recommended thickness of the material: ≥ 0.4 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**
For the mixture of chemicals mentioned below the penetration time has to be at least 480 minutes (Permeation according to EN 374 Part 3: Level 6).
The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **For the permanent contact gloves made of the following materials are suitable:**
Fluorocarbon rubber (Viton)
Nitrile rubber, NBR
· **As protection from splashes gloves made of the following materials are suitable:** Natural rubber, NR
· **Eye protection:** Tightly sealed goggles
· **Body protection:** Protective work clothing

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9 Physical and chemical properties
· **Information on basic physical and chemical properties**
· **General Information**
· **Appearance:**

Form:	Fluid
Color:	According to product specification
· **Odor:**	Characteristic
· **Odour threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	77 °C (171 °F)
· **Flash point:**	41 °C (106 °F)
· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	460 °C (860 °F)
· **Decomposition temperature:**	Not determined.
· **Auto igniting:**	Product is not selfigniting.
· **Danger of explosion:**	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· **Explosion limits:**	
Lower:	0.6 Vol %
Upper:	8.1 Vol %
· **Vapor pressure at 20 °C (68 °F):**	1.2 hPa (1 mm Hg)
· **Density at 20 °C (68 °F):**	0.82 g/cm³ (6.843 lbs/gal)
· **Relative density**	Not determined.
· **Vapour density**	Not determined.
· **Evaporation rate**	Not determined.
· **Solubility in / Miscibility with**	
Water:	Not miscible or difficult to mix.
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
· **Solvent content:**	
Organic solvents:	94.1 %
VOC content:	94.1 % 771.9 g/l / 6.44 lb/gl
· **Other information**	No further relevant information available.

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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:** No further relevant information available.
· **Hazardous decomposition products:** No dangerous decomposition products known.

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11 Toxicological information
· **Information on toxicological effects**
· **Acute toxicity:**
· **LD/LC50 values that are relevant for classification:**

64741-65-7 Naphtha (petroleum), heavy alkylate

Oral	LD50	> 6000 mg/kg (rat)
Dermal	LD50	> 3000 mg/kg (rabbit)

Inhalative LC50/4 h > 7.8 mg/l (rat)
· **Primary irritant effect:**
· **on the skin:** No irritant effect.
· **on the eye:** Irritating effect.
· **Sensitization:** No sensitizing effects known.
· **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

· **Carcinogenic categories**
· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

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· **NTP (National Toxicology Program)**
None of the ingredients is listed.
· **OSHA-Ca (Occupational Safety & Health Administration)**
None of the ingredients is listed.

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12 Ecological information
· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability** No further relevant information available.
· **Behavior in environmental systems:**
· **Bioaccumulative potential** No further relevant information available.
· **Mobility in soil** No further relevant information available.
· **Ecotoxical effects:**
· **Remark:** Toxic for fish
· **Additional ecological information:**
· **General notes:**
Water hazard class 3 (Self-assessment): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms
· **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:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
· **Uncleaned packagings:**
· **Recommendation:** Disposal must be made according to official regulations.

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14 Transport information
· **UN-Number**
· **DOT, ADR, IMDG, IATA** UN1300
· **UN proper shipping name**
· **DOT** Turpentine substitute
· **ADR** 1300 Turpentine substitute, ENVIRONMENTALLY HAZARDOUS
· **IMDG** TURPENTINE SUBSTITUTE, MARINE POLLUTANT
· **IATA** TURPENTINE SUBSTITUTE
· **Transport hazard class(es)**

· **DOT**

· **Class** 3 Flammable liquids
· **Label** 3

· **ADR**

· **Class** 3 (F1) Flammable liquids
· **Label** 3

· **IMDG**

· **Class** 3 Flammable liquids
· **Label** 3

· **IATA**

· **Class** 3 Flammable liquids
· **Label** 3

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· **Packing group**
· **DOT, ADR, IMDG, IATA** III
· **Environmental hazards:** Product contains environmentally hazardous substances: Kohlenwasserstoffe, C9-C12, n-Alkane, iso-Alkane, cyclisch, Aromaten (2-25%)
· **Marine pollutant:** Yes
Symbol (fish and tree)
· **Special marking (ADR):** Symbol (fish and tree)
· **Special precautions for user** Warning: Flammable liquids
· **Danger code (Kemler):** 30
· **EMS Number:** F-E,S-E
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
· **Transport/Additional information:**
· **DOT**
· **Remarks:** Special marking with the symbol (fish and tree).
· **ADR**
· **Excepted quantities (EQ)** Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml
· **IMDG**
· **Limited quantities (LQ)** 5L
· **Excepted quantities (EQ)** Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml
· **UN "Model Regulation":** UN1300, Turpentine substitute, ENVIRONMENTALLY HAZARDOUS, 3, III

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15 Regulatory information
· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
· **Sara**
· **Section 355 (extremely hazardous substances):**
None of the ingredient is listed.
· **Section 313 (Specific toxic chemical listings):**
67-56-1 methanol
· **TSCA (Toxic Substances Control Act):**
123-42-2 4-hydroxy-4-methylpentan-2-one
141-78-6 ethyl acetate
64741-65-7 Naphtha (petroleum), heavy alkylate
5593-70-4 titanium tetrabutanolate
67-56-1 methanol
· **Proposition 65**
· **Chemicals known to cause cancer:**
None of the ingredients is listed.
· **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients is listed.
· **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients is listed.
· **Chemicals known to cause developmental toxicity:**
67-56-1 methanol
· **Cancerogenity categories**
· **EPA (Environmental Protection Agency)**
None of the ingredients is listed.
· **TLV (Threshold Limit Value established by ACGIH)**
None of the ingredients is listed.
· **NIOSH-Ca (National Institute for Occupational Safety and Health)**
None of the ingredients is listed.
· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**

GHS02 GHS07 GHS08

· **Signal word** Danger
· **Hazard-determining components of labeling:**
Kohlenwasserstoffe, C9-C12, n-Alkane, iso-Alkane, cyclisch, Aromaten (2-25%)
4-hydroxy-4-methylpentan-2-one

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ethyl acetate
Acrylat/Styrol Copolymer Dispersion ca. 42% in Wasser

· **Hazard statements**
H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.
H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.
H304 May be fatal if swallowed and enters airways.

· **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.
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.

· **National regulations:**
· **Class Share in %**
· **NK 94.1**
· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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16 Other information
This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Date of preparation / last revision** 04/01/2015 / -
· **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 Organisation
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
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
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)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Flam. Liq. 3: Flammable liquids, Hazard Category 3
Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
Asp. Tox. 1: Aspiration hazard, Hazard Category 1

· *** Data compared to the previous version altered.**