



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

Printing date 27.01.2021


Version number 14.0

Revision: 27.01.2021

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

- **1.1 Product identifier**
- **Trade name: KEIM I&F-GRUND**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the mixture** Priming
- **Uses advised against** All other uses are not recommended.
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
KEIMFARBEN GMBH
Keimstraße 16 / 86420 Diedorf
Tel. +49 (0)821 4802-0
Fax +49 (0)821 4802-210
www.keim.com / info@keimfarben.de
- **Further information obtainable from:**
Product safety department
Telefon: 49(0)821/4802-138
E-Mail: sdb.info@keimfarben.de
- **1.4 Emergency telephone number:**
GBK GmbH Global Regulatory Compliance
Emergency number: +49(0)6132/84463

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
Flam. Liq. 2 H225 Highly flammable liquid and vapour.
Eye Dam. 1 H318 Causes serious eye damage.
STOT SE 3 H336 May cause drowsiness or dizziness.
- **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**

GHS02 GHS05 GHS07
- **Signal word** Danger
- **Hazard-determining components of labelling:**
2-methylpropan-1-ol
ethyl acetate
propan-2-ol
n-butyl acetate

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Hazard statements

- H225 Highly flammable liquid and vapour.
- H318 Causes serious eye damage.
- H336 May cause drowsiness or dizziness.

Precautionary statements

- P102 Keep out of reach of children.
- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P233 Keep container tightly closed.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P315 Get immediate medical advice/attention.
- P405 Store locked up.
- P403+P235 Store in a well-ventilated place. Keep cool.
- P501 Dispose of contents/container in accordance with regional/national regulations.

Additional information:

- EUH066 Repeated exposure may cause skin dryness or cracking.

2.3 Other hazards**Results of PBT and vPvB assessment**

- PBT:** Not applicable
- vPvB:** Not applicable

SECTION 3: Composition/information on ingredients

3.2 Mixtures

- Description:** Preparation based on synthetic resins and organic solvents

Dangerous components:

CAS: 141-78-6 EINECS: 205-500-4 Index number: 607-022-00-5 Reg.nr.: 01-2119475103-46-XXXX	ethyl acetate ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	≥25-<50%
CAS: 67-63-0 EINECS: 200-661-7 Index number: 603-117-00-0 Reg.nr.: 01-2119457558-25-XXXX	propan-2-ol ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	≥10-<20%
CAS: 123-86-4 EINECS: 204-658-1 Index number: 607-025-00-1 Reg.nr.: 01-2119485493-29-XXXX	n-butyl acetate ⚠ Flam. Liq. 3, H226; ⚠ STOT SE 3, H336	≥10-<20%
CAS: 78-83-1 EINECS: 201-148-0 Index number: 603-108-00-1 Reg.nr.: 01-2119484609-23-XXXX	2-methylpropan-1-ol ⚠ Flam. Liq. 3, H226; ⚠ Eye Dam. 1, H318; ⚠ Skin Irrit. 2, H315; STOT SE 3, H335-H336	≥3-<10%

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CAS: 64-17-5 EINECS: 200-578-6 Index number: 603-002-00-5	ethanol ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319	≥2.5-<10%
CAS: 108-65-6 EINECS: 203-603-9 Index number: 607-195-00-7 Reg.nr.: 01-2119475791-29-XXXX	2-methoxy-1-methylethyl acetate ⚠ Flam. Liq. 3, H226; ⚠ STOT SE 3, H336	≥2.5-<10%
CAS: 6846-50-0 EINECS: 229-934-9	1-isopropyl-2,2-dimethyltrimethylene diisobutyrate ⚠ Repr. 2, H361; Aquatic Chronic 3, H412	≥1-<2.5%

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

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· **General information:**

With appearance of symptoms or in cases of doubt seek medical advice .
In case of unconsciousness place patient stably in side position for transportation.
When seeing the doctor we suggest to present this safety data sheet.
Immediately remove any clothing soiled by the product.

· **After inhalation:**

Take affected people into fresh air and keep quiet.
Seek medical treatment in case of complaints.

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.
Do not use solvents or thinners.
If skin irritation continues, consult a doctor.

· **After eye contact:**

Rinse opened eye for several minutes under running water. Then consult a doctor.

· **After swallowing:**

Rinse mouth and throat well with water.
Do not induce vomiting; call for medical help immediately.

· **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:**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **For safety reasons unsuitable extinguishing agents:** Water with full jet

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- **5.2 Special hazards arising from the substance or mixture**
In case of fire, thick, black smoke develops. Inhalation of the dangerous decomposition products may cause serious health damages.
In case of fire, the following can be released:
carbon oxide (COx)
Nitrogen oxides (NOx)
- **5.3 Advice for firefighters**
- **Specila protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**
Cool endangered receptacles with water spray.
Collect contaminated fire fighting water separately. It must not enter the sewage system.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
In case of fire do not breathe smoke, fumes and vapours.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Keep away from ignition sources.
Ensure adequate ventilation
Do not inhale fumes.
Respect the protection rules (see section 7 a. 8).
Wear protective equipment. Keep unprotected people away.
- **6.2 Environmental precautions:**
Do not allow product to reach soil, sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Follow local governmental rules and regulations.
- **6.3 Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
Absorb with non-combustible liquid-binding material (sand, earth, diatomite, vermiculite).
Ensure adequate ventilation.
Dispose of the material collected according to regulations.
Clear contaminated areas thoroughly.
- **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 disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Keep receptacles tightly sealed.
Do not inhale aerosols.
Ensure good ventilation/exhaustion at the workplace.
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
Avoid contact with skin and eyes.
See item 8 (8.2) for information about suitable protective equipment and technical precautions.
Respect the protection rules.

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- **Information about fire - and explosion protection:**
Fumes can combine with air to form an explosive mixture.
Use explosion-proof apparatus / fittings and spark-proof tools.
Use only in explosion protected area.
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store only in unopened original receptacles.
Keep in the original containers in a cool and dry place.
- **Information about storage in one common storage facility:**
Do not store together with alkalis (caustic solutions).
Do not store together with oxidising and acidic materials.
- **Further information about storage conditions:**
Store under lock and key and out of the reach of children.
Store receptacle in a well ventilated area.
Protect from frost.
Please note information on label
Keep container tightly sealed.
Protect from heat and direct sunlight.
- **Storage class: 3**
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· **Ingredients with limit values that require monitoring at the workplace:**

141-78-6 ethyl acetate

AGW (Germany)	Long-term value: 730 mg/m ³ , 200 ppm 2(I);DFG, EU, Y
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67-63-0 propan-2-ol

AGW (Germany)	Long-term value: 500 mg/m ³ , 200 ppm 2(II);DFG, Y
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123-86-4 n-butyl acetate

AGW (Germany)	Long-term value: 300 mg/m ³ , 62 ppm 2(I);AGS, Y
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78-83-1 2-methylpropan-1-ol

AGW (Germany)	Long-term value: 310 mg/m ³ , 100 ppm 1(I);DFG, Y
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64-17-5 ethanol

AGW (Germany)	Long-term value: 380 mg/m ³ , 200 ppm 4(II);DFG, Y
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108-65-6 2-methoxy-1-methylethyl acetate

AGW (Germany)	Long-term value: 270 mg/m ³ , 50 ppm 1(I);DFG, EU, Y
---------------	--

Ingredients with biological limit values:**67-63-0 propan-2-ol**

BGW (Germany)	25 mg/l Untersuchungsmaterial: Vollblut Probennahmezeitpunkt: Expositionsende bzw. Schichtende Parameter: Aceton
	25 mg/l Untersuchungsmaterial: Urin Probennahmezeitpunkt: Expositionsende bzw. Schichtende Parameter: Aceton

· **Additional information:** The lists valid during the making were used as basis.

8.2 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 and skin.
Do not inhale aerosols.

Respiratory protection:

Use suitable respiratory protective device only when aerosol or mist is formed.
Combination filter A

Protection of hands:

After each cleaning use treatment creams, for very dry skin greasy ointments.
Protective gloves

Material of gloves

suitable material e.g.:

Butyl rubber, BR

Recommended thickness of the material: ≥ 0.7 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

Value for the permeation: level ≥ 6 (480 min)

The determined penetration times according to EN 16523-1:2015 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.

Eye protection:

Tightly sealed goggles

if applicable face protection

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- **Body protection:**
Solvent resistant protective clothing
After contact with skin wash thoroughly with water and apply lotion.
- **Limitation and supervision of exposure into the environment**
See Section 12 and 6.2
No further relevant information available.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

· Form:	Fluid
· Colour:	Colourless
· Odour:	Solvent-like
· Odour threshold:	Not determined

· pH-value: Not determined

· Change in condition

· Melting point/freezing point:	Not determined
· Initial boiling point and boiling range:	>35 °C

· Flash point: <7 °C

· Flammability (solid, gas): Not applicable

· Ignition temperature: Not determined

· Decomposition temperature: Not determined

· Auto-ignition temperature: Product is not selfigniting.

· Explosive properties: Product is not explosive. However, the formation of explosive air/vapour mixtures is possible.

· Explosion limits:

· Lower:	0.6 Vol %
· Upper:	15 Vol %

· Oxidising properties: Not applicable

· Vapour pressure at 50 °C: <1,100 hPa

· Density at 20 °C:	0.9* g/cm ³
· Relative density	Not determined
· Vapour density	Not applicable.
· Evaporation rate	Not applicable.

· Solubility in / Miscibility with water: Partly soluble.

· Partition coefficient: n-octanol/water: Not applicable

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· Viscosity:	
Dynamic:	Not determined.
Kinematic at 20 °C:	18 s (DIN 53211/4)
· Solvent separation test:	<3 % (20°C)
· 9.2 Other information	* The values are for freshly produced material and may change with the time.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability** Stable under normal conditions of storage and use.
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:**
Bases
oxidizing agents
Acids
- **10.6 Hazardous decomposition products:**
In case of fire, the following can be released:
Carbon oxides (CO_x)
Nitrogen oxides (NO_x)
No hazardous decomposition products if stored and handled as prescribed.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Primary irritant effect:**
- **Skin corrosion/irritation**
Frequent persistent contact with the skin may cause skin irritation.
Repeated exposure may cause skin dryness or cracking.
- **Serious eye damage/irritation**
Causes serious eye damage.
- **during inhalation:**
Vapours may cause drowsiness and dizziness.
Irritant effect possible.
- **during swallowing:** Irritant effect possible
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Other information (about experimental toxicology):**
Experimental analysis are not available.
The product was not tested. The statements on toxicology have been derived from the properties of the individual components.

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- **Subacute to chronic toxicity:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)** Not applicable
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure**
May cause drowsiness or dizziness.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **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.
- **Additional ecological information:**
- **AOX-indication:**
According to our standard of knowledge the product does not contain any organic bounded halogen.
The product has no influence on the waste water's AOX-value.
- **According to the formulation contains the following heavy metals and compounds from the EU guideline NO. 2006/11/EC:**
According to our current data base the product does not consist of any heavy metals or substances of EU-directives 76/464/EWG.
- **General notes:**
Do not allow product to reach ground water, water course or sewage system.
At present there are no ecotoxicological assessments.
The statements on ecotoxicology have been derived from the properties of the individual components.
Water hazard class 1 (German Regulation) (Self-assessment): slightly 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**
Must not be disposed with household garbage. Do not allow product to reach sewage system.
Disposal must be made according to official regulations.

European waste catalogue

08 01 11* waste paint and varnish containing organic solvents or other hazardous substances

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- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary with cleansing agents.

SECTION 14: Transport information

· 14.1 UN-Number · ADR, IMDG, IATA	UN1263
· 14.2 UN proper shipping name · ADR · IMDG, IATA	1263 PAINT, special provision 640D PAINT
· 14.3 Transport hazard class(es) · ADR, IMDG, IATA	 · Class · Label
	3 Flammable liquids. 3
· 14.4 Packing group · ADR, IMDG, IATA	II
· 14.5 Environmental hazards: · Marine pollutant:	No
· 14.6 Special precautions for user · Hazard identification number (Kemler code): · EMS Number: · Stowage Category	Warning: Flammable liquids. 33 F-E, S-E B
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable
· Transport/Additional information:	
· ADR · Limited quantities (LQ) · Excepted quantities (EQ) · Transport category · Tunnel restriction code	5L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml 2 D/E

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· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1263 PAINT, SPECIAL PROVISION 640D, 3, II

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008**
For information on labelling please refer to section 2 of this document.
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category** P5c FLAMMABLE LIQUIDS
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5,000 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 50,000 t
- **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**
None of the ingredients is listed.
- **National regulations:**
- **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **Other regulations, limitations and prohibitive regulations**
- **Please note:**
TRGS 200 (Germany)
TRGS 500 (Germany)
TRGS 510 (Germany)
TRGS 900 (Germany)
- **Substances of very high concern (SVHC) according to REACH, Article 57** Not applicable
- **Product-Code/Giscode:** BSL50
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 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.

- **Relevant phrases**
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H315 Causes skin irritation.

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H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H361 Suspected of damaging fertility or the unborn child.
H412 Harmful to aquatic life with long lasting effects.

· **Department issuing SDS:** KEIMFARBEN Germany, Product safety department

· **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)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised 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)
TRGS: Technische Regeln für Gefahrstoffe (Technical Rules for Dangerous Substances, BAuA, Germany)
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
AGW: Arbeitsplatzgrenzwert (Germany)
EC10: Effective concentration at 10% mortality rate.
EC50: Half maximal effective concentration.
LC10: Lethal concentration at 10% mortality rate.
NOEC: No observed effect concentration.
REACH: Registration, Evaluation and Authorisation of Chemicals (Regulation (EC) No.1907/2006)
Flam. Liq. 2: Flammable liquids – Category 2
Flam. Liq. 3: Flammable liquids – Category 3
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Repr. 2: Reproductive toxicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

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