

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

Printing date 09.02.2024

Version 8.0 (replaces version 7.0)

Revision: 09.02.2024

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

· **1.1 Product identifier**

· Trade name: **ecoprint**

· Article number: EPX11

· UFI: ST71-X0RH-500Y-TSE8

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.

· **Application of the substance / the mixture**

Photo chemicals

Photographic activities

Photographic developer

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

Hans O. Mahn GmbH & Co KG

Brookstieg 4

22145 Stapelfeld

Deutschland

+49 (0)40 23 70 08 88

info@maco-photo.de

www.maco-photo.de

· **Informing department:**

+49 (0)40 23 70 08 88

info@maco-photo.de

· **1.4 Emergency telephone number:**

Tel.: +49 (0) 700-24112112 (CAL)

Tel.: +1 872 5888271(CAL)

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**



GHS08 health hazard

Muta. 2

H341 Suspected of causing genetic defects.

Carc. 2

H351 Suspected of causing cancer.



GHS05 corrosion

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

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

· **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**



GHS05 GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labelling:**

hydroquinone

sodium hydroxide

4-(methylamino)-phenolsulphate

· **Hazard statements**

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H341 Suspected of causing genetic defects.

H351 Suspected of causing cancer.

H412 Harmful to aquatic life with long lasting effects.

· **Precautionary statements**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P273 Avoid release to the environment.

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

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

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

P308+P313 If exposed or concerned: Get medical advice/attention.

P310 Immediately call a POISON CENTER/doctor.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

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P405
P501

Store locked up.
Dispose of contents/container in accordance with local/regional/
national/international regulations.

· 2.3 Other hazards

No special hazards known if the regulations/instructions for storage and handling are observed. Where applicable, this section provides information on other hazards that do not result in classification but may contribute to the overall hazards of the substance or mixture.

The product does not contain any substance above legal limits that fulfils the criteria for PBT (persistent, bioaccumulative and toxic) or vPvB (very persistent and very bioaccumulative). The product does not contain any substance above the legal limits that has been included in the list drawn up in accordance with Article 59(1) of Regulation (EC) No 1907/2006 due to endocrine disrupting properties or that has endocrine disrupting or endocrine disrupting properties in accordance with Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

· Results of PBT and vPvB assessment

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

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

- **Description:** Mixture of the substances listed below with harmless additions.

· Dangerous components:

CAS: 497-19-8 EINECS: 207-838-8	sodium carbonate ☠ Eye Irrit. 2, H319	≥ 5 - < 10%
CAS: 123-31-9 EINECS: 204-617-8	hydroquinone ☠ Muta. 2, H341; Carc. 2, H351 ☠ Eye Dam. 1, H318 ☠ Aquatic Acute 1, H400 (M=10) ☠ Acute Tox. 4, H302; Skin Sens. 1, H317	≥ 2 - < 2.5%
CAS: 1310-73-2 EINECS: 215-185-5	sodium hydroxide ☠ Met. Corr.1, H290; Skin Corr. 1B, H314	≥ 1 - < 2%
CAS: 7758-02-3 EINECS: 231-830-3	potassium bromide ☠ Eye Irrit. 2, H319	0.5 - 2%
CAS: 55-55-0 EINECS: 200-237-1	4-(methylamino)-phenolsulphate ☠ STOT RE 2, H373 ☠ Aquatic Chronic 1, H410 ☠ Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317	≥ 0.5 - < 1%

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- **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**

Personal protection for the First Aider.
Instantly remove any clothing soiled by the product.

- **After inhalation** Supply fresh air; consult doctor in case of symptoms.

· **After skin contact**

Instantly wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.

· **After eye contact**

Rinse opened eye for several minutes under running water (at least 15 minutes).
Remove contact lenses, if present and easy to do.
Protect uninjured eye.
Call a doctor immediately.

· **After swallowing**

Rinse out mouth and then drink plenty of water.
In case of persistent symptoms consult doctor.

· **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**

Basic relief, decontamination, symptomatic treatment.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**

· **Suitable extinguishing agents**

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

Use fire fighting measures that suit the environment.

- **For safety reasons unsuitable extinguishing agents** Water with a full water jet.

· **5.2 Special hazards arising from the substance or mixture**

Can be released in case of fire

Carbon monoxide

sulphur dioxide (SO₂)

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- **5.3 Advice for firefighters**
- **Protective equipment:**
Do not inhale explosion gases or combustion gases.
At formation of toxic gases:
Put on breathing apparatus.
- **Additional information** The product is not flammable

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective clothing.
- **6.2 Environmental precautions:**
Do not allow to enter drainage system, surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste according to item 13.
- **6.4 Reference to other sections**
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**
Do not handle until all safety precautions have been read and understood.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**
The product is not flammable
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:**
Keep container tightly sealed.
- **Information about storage in one common storage facility:**
Store away from oxidising agents.
Keep away from foodstuffs, beverages and food.
- **Further information about storage conditions:**
Keep container tightly sealed.
Store in a cool place.
- **Recommended storage temperature: 5-25 °C**

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- **Storage class 8 B**
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Components with limit 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.

123-31-9 hydroquinone

OEL (Ireland)	Long-term value: 0.5 mg/m ³ Sens
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- **Additional information:**
The lists that were valid during the compilation were used as basis.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see section 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures**
Wash contaminated clothing before reuse.
The usual precautionary measures should be adhered to general rules for handling chemicals.
Keep away from foodstuffs, beverages and food.
Take off immediately all contaminated clothing.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.
Do not eat, drink or smoke while working.
- **Breathing equipment:**
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.
- **Hand protection**
Protective gloves.
The protective gloves to be used must comply with the specifications of the (EU) 2016/425 and the resultant standard EN 374.
This recommendation applies only to the product stated in the Safety Data Sheet and supplied by us as well as to the purpose specified by us.
Only use chemical-protective gloves with CE-labelling of category III.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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· **Material of gloves**

Thickness	Breakthrough time	
	(mm)	(min)
Nitril rubber	0,38	> 480
Neoprene	0,65	> 240
Butyl rubber	0,36	> 480

Avoid natural rubber gloves.

· **As protection from splashes gloves made of the following materials are suitable:**

Synthetic gloves

Value for the permeation: Level:
≥ 3 (60 min)

· **Eye/face protection** Tightly sealed safety glasses.

· **Body protection:** Protective work clothing.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· Physical state	Fluid
· Colour:	Colourless
· Odour:	Not characteristic
· Odour threshold:	Not determined.
· Melting point/freezing point:	Not determined
· Boiling point or initial boiling point and boiling range	> 100 °C
· Flammability	Not applicable.
· Lower and upper explosion limit	
· Lower:	Not determined.
· Upper:	Not determined.
· Flash point:	Not applicable
· Decomposition temperature:	Not determined.
· pH at 20 °C	11.5
· Viscosity:	
· Kinematic viscosity	Not determined.
· dynamic:	Not determined
· Solubility	
· Water:	miscible
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure at 20 °C:	23 hPa

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- **Density and/or relative density**
- **Density at 20 °C** 1.21 g/cm³
- **Relative density** Not determined.
- **Vapour density** Not determined.

- **9.2 Other information**
- **Appearance:**
- **Form:** Fluid
- **Important information on protection of health and environment, and on safety.**
- **Self-inflammability:** Product is not selfigniting.
- **Explosive properties:** Product is not explosive.
- **Solvent separation test** Not determined
- **Change in condition**
- **Softening point/range**
- **Oxidising properties** None
- **Evaporation rate** Not determined.

- **Information with regard to physical hazard classes**
- **Explosives** Void
- **Flammable gases** Void
- **Aerosols** Void
- **Oxidising gases** Void
- **Gases under pressure** Void
- **Flammable liquids** Void
- **Flammable solids** Void
- **Self-reactive substances and mixtures** Void
- **Pyrophoric liquids** Void
- **Pyrophoric solids** Void
- **Self-heating substances and mixtures** Void
- **Substances and mixtures, which emit flammable gases in contact with water** Void
- **Oxidising liquids** Void
- **Oxidising solids** Void
- **Organic peroxides** Void
- **Corrosive to metals** Void
- **Desensitised explosives** Void

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SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **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
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**
No dangerous decomposition products known

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values that are relevant for classification:**

ATE (Acute Toxicity Estimates)		
Oral	LD50	12,678 mg/kg (rat)
Dermal	LD50	> 39,130 mg/kg (rat)
Inhalative	LC50/4 h	> 66.3 mg/l (rat)

- **Skin corrosion/irritation** Causes severe skin burns and eye damage.
- **Serious eye damage/irritation** Causes serious eye damage.
- **Respiratory or skin sensitisation** May cause an allergic skin reaction.
- **Germ cell mutagenicity** Suspected of causing genetic defects.
- **Carcinogenicity** Suspected of causing cancer.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **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.
- **Additional toxicological information:**
At present there are no animal experimental data.
This statement was deduced from the properties of the single components.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
Limited evidence of a carcinogenic effect.
Possible risk of irreversible effects.

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· **11.2 Information on other hazards**

· **Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **12.2 Persistence and degradability** Not determined

· **Behaviour in environmental systems:** Not determined

· **12.3 Bioaccumulative potential** Not determined

· **12.4 Mobility in soil** No further relevant information available.

· **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

· **12.7 Other adverse effects**

· **Ecotoxicological effects:** No further relevant information available.

· **Remark:** Harmful to fish

· **Behaviour in sewage processing plants:** Not determined

· **Additional ecological information:**

· **General notes:**

This statement was deduced from the properties of the single components.

Water hazard class 3 (German Regulation) (Self-assessment): highly water-endangering.

Do not allow product to reach ground water, water bodies or sewage system, even in small quantities.

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

Danger to drinking water if even small quantities leak into soil.

At present there are no ecotoxicological assessments.

Harmful to aquatic organisms

The product does not contain organically bounded halogens (AOX-free).

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

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SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Must be specially treated under adherence to official regulations.

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

· **European waste catalogue**

09 00 00	WASTES FROM THE PHOTOGRAPHIC INDUSTRY
09 01 00	wastes from the photographic industry
09 01 01*	water-based developer and activator solutions
HP7	Carcinogenic
HP11	Mutagenic
HP14	Ecotoxic

· **Uncleaned packagings:**

· **Recommendation:**

Non contaminated packagings can be used for recycling.

Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.

· **Recommended cleaning agent:** Water, if necessary with cleaning agent.

SECTION 14: Transport information

· **14.1 UN number or ID number**

· **ADR/RID, IMDG, IATA** UN1719

· **14.2 UN proper shipping name**

· **ADR/RID, IMDG, IATA** CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE)

· **14.3 Transport hazard class(es)**

· **ADR/RID, IMDG, IATA**



· **Class** 8 Corrosive substances.

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· Label	8
· 14.4 Packing group · ADR/RID, IMDG, IATA	III
· 14.5 Environmental hazards:	Not applicable.
· 14.6 Special precautions for user · Kemler Number: · EMS Number: · Segregation groups · Stowage Category · Segregation Code	Warning: Corrosive substances. 80 F-A,S-B (SGG18) Alkalis A SG22 Stow "away from" ammonium salts SG35 Stow "separated from" SGG1-acids
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
· Transport/Additional information:	
· ADR/RID	
· Limited quantities (LQ) · Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· Transport category · Tunnel restriction code	3 E
· IMDG	
· Limited quantities (LQ) · Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 1719 CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYDROXIDE), 8, III

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**

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

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· **Hazard pictograms**



GHS05 GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labelling:**

hydroquinone
sodium hydroxide
4-(methylamino)-phenolsulphate

· **Hazard statements**

H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H341 Suspected of causing genetic defects.
H351 Suspected of causing cancer.
H412 Harmful to aquatic life with long lasting effects.

· **Precautionary statements**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or 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.
P308+P313 If exposed or concerned: Get medical advice/attention.
P310 Immediately call a POISON CENTER/doctor.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

· **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.

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· **REGULATION (EU) 2019/1148**

· **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

· **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

None of the ingredients is listed.

· **Regulation (EC) No 273/2004 on drug precursors**

None of the ingredients is listed.

· **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

None of the ingredients is listed.

· **National regulations**

· **Information about limitation of use:**

Employment restrictions concerning pregnant and lactating women must be observed.

· **Decree to be applied in case of technical fault:**

Class	Share in %
I	2.3

· **Water hazard class:**

Water danger class 3 (Self-assessment): highly water-endangering.

· **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.

· **Relevant phrases**

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H341 Suspected of causing genetic defects.

H351 Suspected of causing cancer.

H373 May cause damage to organs through prolonged or repeated exposure.

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H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

· **Version number of previous version: 7.0**· **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 relatif au transport international 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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Met. Corr. 1: Corrosive to metals – Category 1

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

Muta. 2: Germ cell mutagenicity – Category 2

Carc. 2: Carcinogenicity – Category 2

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· **Sources**

applicable EEC directives:

- 1907/2006

- 1272/2008

Internal physical tests, MSDS of the ingredients,

Information system on hazardous substances of the German Social Accident Insurance
(GESTIS-database on hazardous substances), [http://www.dguv.de/ifa/en/gestis/stoffdb/
index.jsp](http://www.dguv.de/ifa/en/gestis/stoffdb/index.jsp)

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