



SAFETY DATA SHEET

HC-110 PRO

SECTION 1: IDENTIFICATION

1.1. Product identifier

Trade name: HC-110 PRO

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the substance or mixture: Photographic developer

Uses advised against : None known.

1.3. Details of the supplier of the safety data sheet

Company and address: **ADOX Fotowerke GmbH**
Pieskower Str. 30 A
15526 Bad Saarow
Deutschland
+49 (0)33631 6459-25
<https://www.adox.de>

E-mail: info@adox.de

SDS date: 2/3/2025

SDS Version: 3.0

Date of previous version: 1/28/2025 (2.0)

1.4. Emergency telephone number

Contact the poison control at 1-800-222-1222 (24/7) or use the webPOISONCONTROL® ([triage.webpoisoncontrol.org](https://www.webpoisoncontrol.org)) to get specific guidance for your case
See also section 4 "First aid measures".

SECTION 2: HAZARD(S) IDENTIFICATION

OSHA/HCS status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

2.1. Classification of the substance or mixture

Acute Tox. 4; H302, Harmful if swallowed.

Skin Irrit. 2; H315, Causes skin irritation.

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

Eye Dam. 1; H318, Causes serious eye damage.

STOT SE 3; H335, May cause respiratory irritation.

Muta. 2; H341, Suspected of causing genetic defects.

Carc. 1B; H350, May cause cancer.

Repr. 2; H361, Suspected of damaging fertility or the unborn child.

STOT RE 2; H373, May cause damage to organs through prolonged or repeated exposure.

2.2. Label elements

Hazard pictogram(s):



Signal word:

Danger

Hazard statement(s):

Harmful if swallowed. (H302)
 Causes skin irritation. (H315)
 May cause an allergic skin reaction. (H317)
 Causes serious eye damage. (H318)
 May cause respiratory irritation. (H335)
 Suspected of causing genetic defects. (H341)
 May cause cancer. (H350)
 Suspected of damaging fertility or the unborn child. (H361)
 May cause damage to organs through prolonged or repeated exposure. (H373)

Precautionary statement(s):

General:

If medical advice is needed, have product container or label at hand. (P101)
 Keep out of reach of children. (P102)

Prevention:

Obtain special instructions before use. (P201)
 Do not breathe vapour/mist. (P260)
 Wash hands and exposed skin thoroughly after handling. (P264)
 Do not eat, drink or smoke when using this product. (P270)
 Use only outdoors or in a well-ventilated area. (P271)
 Wear eye protection/protective gloves/protective clothing. (P280)

Response:

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. (P301+P312)
 IF ON SKIN: Wash with plenty of water and soap. (P302+P352)
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)
 IF exposed or concerned: Get medical advice/attention. (P308+P313)
 Immediately call a POISON CENTER/doctor. (P310)
 Get medical advice/attention if you feel unwell. (P314)
 If skin irritation or rash occurs: Get medical advice/attention. (P333+P313)
 Take off contaminated clothing and wash it before reuse. (P362+P364)

Storage:

Store in a well-ventilated place. Keep container tightly closed. (P403+P233)
 Store locked up. (P405)

Disposal:

Dispose of contents/container in accordance with local regulation (P501)

Additional labelling:

Restricted to professional users.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable. This product is a mixture.

3.2. ▼ Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
1,4-dihydroxybenzene;hydroquinone;quinol	CAS No.: 123-31-9	5-10%	Acute Tox. 4, H302 Skin Sens. 1B, H317 Eye Dam. 1, H318 Muta. 2, H341 Carc. 2, H351	
2-aminoethanol;ethanolamine	CAS No.: 141-43-5	1-3%	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Acute Tox. 4, H332 STOT SE 3, H335 (SCL: 5.00 %)	
N-carboxymethyliminobis(ethylenenitrilo)tetra(acetic acid)	CAS No.: 67-43-6	1-3%	Eye Irrit. 2, H319 Acute Tox. 4, H332 Repr. 1B, H360D (SCL: 3.00 %) STOT RE 2, H373	
Potassium bromide	CAS No.: 7758-02-3	1-3%	Eye Irrit. 2, H319	
4-methyl-1-phenyl-3-pyrazolidone	CAS No.: 2654-57-1	<1%	Acute Tox. 4, H302 Skin Sens. 1, H317	
1,2-dihydroxybenzene;pyrocatechol	CAS No.: 120-80-9	<1%	Acute Tox. 3, H301 Acute Tox. 3, H311 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Muta. 2, H341 Carc. 1B, H350	

Where the concentration of an ingredient is expressed as a range the exact concentration has been withheld as a trade secret.

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

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SECTION 4: FIRST-AID MEASURES

4.1. Description of first aid measures

General information:

If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 911 and give immediate treatment (first aid).

Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation:

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact:

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

Eye contact:

If in eyes: Flush eyes with plenty of water or salt water (20-30 °C) for at least 30 minutes and continue until irritation stops. Remove contact lenses. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport.

Ingestion:

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

Rinse mouth.

Burns:

Not applicable.

4.2. Most important symptoms and effects, both acute and delayed

Headache, Methaemoglobinaemia (1,4-dihydroxybenzene;hydroquinone;quinol)

Headache, Methaemoglobinaemia (1,2-dihydroxybenzene;pyrocatechol)

Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact. Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.

The product contains substances that cause serious eye damage. Contact with these substances can cause irreversible effects on the eye / serious eye damage.

4.3. Indication of any immediate medical attention and special treatment needed

IF exposed or concerned:

Get immediate medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Halogenated compounds
Nitrogen oxides (NO_x)
Carbon oxides (CO / CO₂)
Some metal oxides

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact the Poison Help Line on 1-800-222-1222 (24/7) in order to obtain further advice.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances.
Ensure adequate ventilation, especially in confined areas.
Avoid inhalation of vapours from spilled material.
Contaminated areas may be slippery.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid direct contact with the product.
Avoid contact during pregnancy and while nursing.
Smoking, drinking and consumption of food is not allowed in the work area.
See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Store locked up. A sign warning of toxic materials shall be affixed the room and cupboard containing the product(s).
Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material: Always store in containers of the same material as the original container.

Storage conditions: No specific requirements

Incompatible materials: Acids

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

1,4-dihydroxybenzene;hydroquinone;quinol

Long term exposure limit (OSHA Table Z-1) (mg/m³): 2

Long term exposure limit (ACGIH TLV) (mg/m³): 1

Ceiling value (NIOSH REL) (mg/m³): 2 [15-min]

2-aminoethanol;ethanolamine

Short term exposure limit (STEL) (ACGIH TLV) (ppm): 6

Short term exposure limit (STEL) (NIOSH REL) (ppm): 6

Long term exposure limit (OSHA Table Z-1) (mg/m³): 6

Long term exposure limit (OSHA Table Z-1) (ppm): 3

Long term exposure limit (ACGIH TLV) (ppm): 3

Part 1910 - Occupational Safety and Health Standards (29 CFR 1910.1000 TABLE Z-1 - Limits for Air Contaminants)

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations:

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios:

There are no exposure scenarios implemented for this product.

Exposure limits:

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures:

Do not recirculate outlet air that contain the substances. The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked. Ensure that eyewash stations and safety showers are located within easy reach. Apply standard precautions during use of the product. Avoid inhalation of vapours.

Hygiene measures:

Take off contaminated clothing and wash it before reuse.

Measures to avoid environmental exposure:

Keep damming materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment

Generally:

Use only protective equipment with a recognized certification mark, e.g. the UL mark.

Respiratory Equipment:

No specific requirements

Skin protection:

Recommended	Type/Category	Standards	
Wear appropriate protection clothing, e.g. coveralls in polypropylene or working clothes in cotton or polyester.	-	-	

Hand protection:

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Nitrile	0,38	> 480	EN374-2, EN374-3, EN388	

Eye protection:

Type	Standards	
Safety glasses with side shields.	EN166	

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

<i>Physical state:</i>	Liquid
<i>Color:</i>	Yellow
<i>Odor:</i>	No relevant or available data due to the nature of the product.
<i>Odor threshold (ppm):</i>	No relevant or available data due to the nature of the product.
<i>pH:</i>	No relevant or available data due to the nature of the product.
<i>Density (g/cm³):</i>	No relevant or available data due to the nature of the product.
<i>Kinematic viscosity:</i>	No relevant or available data due to the nature of the product.
<i>Particle characteristics:</i>	Does not apply to liquids.

Phase changes

<i>Melting point/freezing point (°F):</i>	No relevant or available data due to the nature of the product.
<i>Softening point/range (°F):</i>	Does not apply to liquids.
<i>Boiling point (°F):</i>	No relevant or available data due to the nature of the product.
<i>Vapor pressure:</i>	No relevant or available data due to the nature of the product.
<i>Relative vapor density:</i>	No relevant or available data due to the nature of the product.

Decomposition temperature (°F): No relevant or available data due to the nature of the product.

Data on fire and explosion hazards

Flash point (°F): No relevant or available data due to the nature of the product.

Flammability (°F): No relevant or available data due to the nature of the product.

Auto-ignition temperature (°F): No relevant or available data due to the nature of the product.

Explosion limits (% v/v): No relevant or available data due to the nature of the product.

Solubility

Solubility in water: No relevant or available data due to the nature of the product.

n-octanol/water coefficient (LogKow): No relevant or available data due to the nature of the product.

Solubility in fat (g/L): No relevant or available data due to the nature of the product.

9.2. Other information

Other physical and chemical parameters: No data available.

Oxidizing properties: No relevant or available data due to the nature of the product.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. Possibility of hazardous reactions, including those associated with foreseeable emergencies

None known.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Acids

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

Product/substance	1,4-dihydroxybenzene;hydroquinone;quinol
Test method:	OECD 401
Species:	Rat, female
Route of exposure:	Oral
Test:	LD50
Result:	367,3 mg/kg

Product/substance	1,4-dihydroxybenzene;hydroquinone;quinol
Species:	Rabbit, male/female
Route of exposure:	Dermal
Result:	>2000 mg/kg

Harmful if swallowed.

Skin corrosion/irritation

Product/substance	1,4-dihydroxybenzene;hydroquinone;quinol
Species:	Rabbit
Duration:	24 hours
Result:	No adverse effect observed (Not irritating)

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye damage.

Respiratory sensitisation

Based on available data, the classification criteria are not met.

Skin sensitisation

Product/substance	1,4-dihydroxybenzene;hydroquinone;quinol
Test method:	OECD 429

Germ cell mutagenicity

Suspected of causing genetic defects.

Carcinogenicity

May cause cancer.

Reproductive toxicity

Suspected of damaging fertility or the unborn child.

STOT-single exposure

May cause respiratory irritation.

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

Based on available data, the classification criteria are not met.

Long term effects

Carcinogenic effects: This product contains substances considered or proven to be carcinogenic. The carcinogenic effects may be triggered subsequent to exposure through inhalation, skin contact or ingestion.

The product contains substances that cause serious eye damage. Contact with these substances can cause irreversible effects on the eye / serious eye damage.

▼ Other information

1,4-dihydroxybenzene;hydroquinone;quinol has been classified by IARC as a group 3 carcinogen.

1,2-dihydroxybenzene;

pyrocatechol has been classified by IARC as a group 2B carcinogen.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Product/substance 1,4-dihydroxybenzene;hydroquinone;quinol
Test method: OECD 203
Species: Fish, Oncorhynchus mykiss
Duration: 96 hours
Test: LC50
Result: 0,638 mg/L

12.2. Persistence and degradability

Based on available data, the classification criteria are not met.

12.3. Bioaccumulative potential

Based on available data, the classification criteria are not met.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

RCRA Hazardous waste ("P" and "U" list) (40 CFR 261)

None of the components are listed

Specific labelling

Contaminated packing

SECTION 14: TRANSPORT INFORMATION

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other informat ion:
DOT	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	Transport hazard class: 9 Label: 9 Classification code: M6 	III	No	Limited quantitie s: 5 L Tunnel restrictio n code: (-) See below for additiona l

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other informat ion:
						informati on.
IMDG	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	Transport hazard class: 9 Label: 9 Classification code: M6 	III	No	Limited quantitie s: 5 L EmS: F-A S-F See below for additiona l informati on.
IATA	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	Transport hazard class: 9 Label: 9 Classification code: M6 	III	No	See below for additiona l informati on.

* Packing group

** Environmental hazards

Additional information

These substances when carried in single or combination packaging's containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids, are not subject to any other provisions of DOT/IMDG/IATA provided the packaging's meet the general specifications for packaging: Part 178 (DOT) / 4.1.1.1, 4.1.1.2, 4.1.1.4 - 4.1.1.8 (IMDG) / 5.0.2.4.1, 5.0.2.6.1.1, 5.0.2.8 (IATA).

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DOT / See § 172.101 Hazardous Materials Table for any information on special provisions, requirements, or warnings in connection with transport. See § 172.602, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.
IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to IMO instruments

No data available.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance

or mixture

15.2. ▼ U.S. Federal regulations

TSCA (the non-confidential portion):

1,4-dihydroxybenzene;hydroquinone;quinol is listed
2-aminoethanol;ethanolamine is listed
N-carboxymethyliminobis(ethylenenitrilo)tetra(acetic acid) is listed
Potassium bromide is listed
ethanediol;ethylene glycol is listed
4-methyl-1-phenyl-3-pyrazolidone is listed
1,2-dihydroxybenzene;
pyrocatechol is listed

▼ Clean Air Act:

1,4-dihydroxybenzene;hydroquinone;quinol is regulated as a hazardous air pollutant (HAPS)
ethanediol;ethylene glycol is regulated as a hazardous air pollutant (HAPS)
1,2-dihydroxybenzene;
pyrocatechol is regulated as a hazardous air pollutant (HAPS)

EPCRA Section 302:

1,4-dihydroxybenzene;hydroquinone;quinol is regulated with a Treshold Planning Quantity (TPQ) of: 500/10000 pounds

EPCRA Section 304:

1,4-dihydroxybenzene;hydroquinone;quinol is regulated with a Reportable Quantity (RQ) of: 100 pounds

▼ EPCRA section 313:

1,4-dihydroxybenzene;hydroquinone;quinol is listed
ethanediol;ethylene glycol is listed
1,2-dihydroxybenzene;
pyrocatechol is listed

▼ CERCLA:

1,4-dihydroxybenzene;hydroquinone;quinol is regulated with a Reportable Quantity (RQ) of: 100 pounds
ethanediol;ethylene glycol is regulated with a Reportable Quantity (RQ) of: 5000 pounds
1,2-dihydroxybenzene;
pyrocatechol is regulated with a Reportable Quantity (RQ) of: 100 pounds

Hazardous chemical inventory reporting:

This product is subject to Tier II reporting.

▼ State regulations

▼ California / Prop. 65:

ethanediol;ethylene glycol is known to cause:
Developmental Toxicity
NSRL/MADL (µg/day): 8700 (oral)

—
1,2-dihydroxybenzene;
pyrocatechol is known to cause: Cancer

▼ Massachusetts / Right To Know Act:

1,4-dihydroxybenzene;hydroquinone;quinol is listed
2-aminoethanol;ethanolamine is listed
ethanediol;ethylene glycol is listed
1,2-dihydroxybenzene;
pyrocatechol is listed

▼ <i>New Jersey / Right To Know Act:</i>	1,4-dihydroxybenzene;hydroquinone;quinol / Substance number: 1019 — 2-aminoethanol;ethanolamine / Substance number: 0835 2-aminoethanol;ethanolamine is on the Special Health Hazard Substance List — ethanediol;ethylene glycol / Substance number: 0878 — 1,2-dihydroxybenzene; pyrocatechol / Substance number: 0722 1,2-dihydroxybenzene; pyrocatechol is on the Special Health Hazard Substance List
▼ <i>New York / Right To Know Act:</i>	— 1,4-dihydroxybenzene;hydroquinone;quinol is listed 1,4-dihydroxybenzene;hydroquinone;quinol is regulated with a Reportable Quantity (RQ) of: 1 pounds 1,4-dihydroxybenzene;hydroquinone;quinol is regulated with a Treshold Reporting Quantity (TRQ) of: 0 pounds 1,4-dihydroxybenzene;hydroquinone;quinol is regulated with a Treshold Planning Quantity (TPQ) of: 500*/10000 pounds *Quantity applies if the substance is present in the form of a fine powder (particle size less than 100 microns), molten or in solution, or reacts with water. — 2-aminoethanol;ethanolamine is listed 2-aminoethanol;ethanolamine is regulated with a Treshold Reporting Quantity (TRQ) of: 100 pounds — ethanediol;ethylene glycol is listed ethanediol;ethylene glycol is regulated with a Reportable Quantity (RQ) of: 1 pounds ethanediol;ethylene glycol is regulated with a Treshold Reporting Quantity (TRQ) of: 0 pounds — 1,2-dihydroxybenzene; pyrocatechol is listed 1,2-dihydroxybenzene; pyrocatechol is regulated with a Reportable Quantity (RQ) of: 1 pounds 1,2-dihydroxybenzene; pyrocatechol is regulated with a Treshold Reporting Quantity (TRQ) of: 0 pounds
▼ <i>Pennsylvania / Right To Know Act:</i>	— 1,4-dihydroxybenzene;hydroquinone;quinol is listed 1,4-dihydroxybenzene;hydroquinone;quinol is hazardous to the environment (E) — 2-aminoethanol;ethanolamine is listed — ethanediol;ethylene glycol is listed

ethanediol;ethylene glycol is hazardous to the environment (E)

—
1,2-dihydroxybenzene;
pyrocatechol is listed
1,2-dihydroxybenzene;
pyrocatechol is hazardous to the environment (E)
—

15.4. Restrictions for application

Restricted to professional users.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

15.5. Demands for specific education

No specific requirements.

15.6. Additional information

Not applicable.

15.7. Chemical safety assessment

No

15.8. Sources

OSHA Hazard Communication Standard (29 CFR 1910.1200)

SECTION 16: OTHER INFORMATION

▼ Full text of H-phrases as mentioned in section 3

H301, Toxic if swallowed.

H302, Harmful if swallowed.

H311, Toxic in contact with skin.

H312, Harmful in contact with skin.

H314, Causes severe skin burns and eye damage.

H315, Causes skin irritation.

H317, May cause an allergic skin reaction.

H318, Causes serious eye damage.

H319, Causes serious eye irritation.

H332, Harmful if inhaled.

H335, May cause respiratory irritation.

H341, Suspected of causing genetic defects.

H350, May cause cancer.

H351, Suspected of causing cancer.

H360D, May damage the unborn child.

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

The full text of identified uses as mentioned in section 1

None known.

Abbreviations and acronyms

ACGIH = American Conference of Governmental Industrial Hygienists

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CERCLA = Comprehensive Environmental Response Compensation and Liability Act
DOT = Department of Transportation
EINECS = European Inventory of Existing Commercial chemical Substances
EPCRA = Emergency Planning and Community Right-To-Know Act
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
HCIS = Hazardous Chemical Information System
HNOC = Hazards Not Otherwise Classified
IARC = International Agency for Research on Cancer
IATA = International Air Transport Association
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
NFPA = National Fire Protection Association
NIOSH = National Institute for Occupational Safety and Health
OECD = Organisation for Economic Co-operation and Development
OSHA = Occupational Safety and Health Administration
PBT = Persistent, Bioaccumulative and Toxic
RCRA = Resource Conservation and Recovery Act
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SARA = Superfund Amendments and Reauthorization Act
SCL = A specific concentration limit.
STEL = Short-term exposure limits
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TSCA = The Toxic Substances Control Act
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by HCS (29 CFR 1910.1200).

The safety data sheet is validated by

KL

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product.

Information in this safety data sheet cannot be used as a product specification.

Country-language: US-en