

SAFETY DATA SHEET

KODAK PROFESSIONAL HC-110 Developer

SECTION 1: IDENTIFICATION

1.1.	Product identifier			
	▼Trade name:	KODAK PROFESSIONAL HC-110 Developer Obtain special instructions before use.		
	Product no.:	1058692		
1.2.	Relevant identified uses of the substance or mixture and uses advised against			
	Relevant identified uses of the substance or mixture:	Photographic chemical (developer/activator) for black and white film.		
	▼ Uses advised against :	None known.		
1.3.	Details of the supplier of the s	afety data sheet		
	Company and address: Manufacturer:	 Photo Systems Inc. 7190 Huron River Drive MI 48130 Dexter USA Tel: +1 (734) 424-9625 Fax: +1-734-580-2199 www.photosys.com For further information about this product email EHS-Questions @photosys.com Photo Systems Inc. 7190 Huron River Drive MI 48130 Dexter USA Tel: +1 (734) 424-9625 Fax: +1-734-580-2199 www.photosys.com 		
	Contact person:	Jake Bolt		
	E-mail:	jake@photosys.com		
	SDS date:	2/22/2024		
	SDS Version:	3.0		
	Date of previous version:	10/13/2023 (2.0)		
1.4.	Emergency telephone number Contact the poison control at 1-800-222-1222 (24/7) or use the webPOISONCONTROL®			



SECTION 2: HAZARD(S) IDENTIFICATION

OSHA/HCS status

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

V Classification of the substance or mixture 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. Muta. 2; H341, Suspected of causing genetic defects. Carc. 2; H351, Suspected of causing cancer. STOT RE 2; H373, May cause damage to organs through prolonged or repeated exposure.

2.2. Label elements

Hazard pictogram(s):



Signal word: ▼ Hazard statement(s):	Danger Causes skin irritation. (H315)
	May cause an allergic skin reaction. (H317) Causes serious eye damage. (H318) Suspected of causing genetic defects. (H341) Suspected of causing cancer. (H351) 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) Wear protective gloves/protective clothing/eye protection/face protection. (P280)
Response:	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 locked up. (P405)
Disposal:	Dispose of contents/container in accordance with local regulation (P501)
Additional labelling:	Not applicable.
Other hazards	
▼ Additional warnings:	This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

2.3.

Not applicable. This product is a mixture.

3.2. ▼Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Potassium Sulfite Solution 45%	CAS No.: 10117-38-1	40-60%		
hydroquinone	CAS No.: 123-31-9	10-15%	Acute Tox. 4, H302 Skin Sens. 1B, H317 Eye Dam. 1, H318 Muta. 2, H341 Carc. 2, H351	
2,2'-oxydiethanol	CAS No.: 111-46-6	5-10%	Acute Tox. 4, H302	
Borax Pentahydrate	CAS No.: 12179-04-3	3-5%	Eye Irrit. 2, H319 Repr. 1B, H360 (SCL: 6.50 %)	
Potassium hydroxide 45%	CAS No.: 1310-58-3	1-3%	Met. Corr. 1, H290 Acute Tox. 4, H302 Skin Corr. 1, H314 Eye Dam. 1, H318	
sodium bromide	CAS No.: 7647-15-6	1-3%		
Dissolvine H-40 CAS No.: 139-89-9 1-3% Acute Tox. 4, H302 Eye Dam. 1, H318				
diethanolamine CAS No.: 111-42-2 1-3% Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 2, H371 STOT RE 2, H373		Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 2, H371		
Dimezone S	CAS No.: 13047-13-7	<1%	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335	



Pyrocatechol	CAS No.: 120-80-9	<0.05%	Acute Tox. 3, H301	
			Acute Tox. 3, H311	
			Skin Irrit. 2, H315	
			Skin Sens. 1, H317	
			Eye Dam. 1, H318	
			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

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. Get medical attention if symptoms occur.		
	Skin contact:	Immediately flush skin with plenty of water. Remove contaminated clothing. Get medical attention in if symptoms occur or in case of eczema or other skin disorders.		
	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:	Never give anything by mouth to an unconscious person. No NOT induce vomiting. Rinse mouth. If vomiting occurs, keep head low so that stomach content does not get into the lungs. Get medical attention immediately.		
	Burns:	Not applicable.		

4.2.

▼ Most important symptoms and effects, both acute and delayed Most important known symptoms and effects are described in the labeling (see Section 2.2 and



in Section 11.)

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

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

No unusual fire or explosion hazards noted 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

In the event of fire, incompatible materials are strong acids, strong oxidizing agents, aluminum, ammonia. Hazardous decomposition products are: Sulphur oxides and Nitrogen oxides (NOx)

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

Keep unnecessary personnel away. Use personnel protective equipment and clothing recommended in Section 8.

Avoid direct contact with spilled substances.

Ensure adequate ventilation, especially in confined areas.

Contaminated areas may be slippery.

6.2. Environmental precautions

Prevent product from entering drains, water courses or onto the ground. 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 8 "Exposure controls/personal protection" for information on personal protection. See Section 13 "Disposal considerations" on handling of waste.

SECTION 7: HANDLING AND STORAGE



7.1. Precautions for safe handling

Obtain special instructions before use. do not handle until all safety precautions have been read and understood. Do not get this material in contact with eyes. Do not taste or swallow. Avoid contact with skin and clothing. Avoid prolonged exposure. When using, Do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after 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

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material:	Keep only in original packaging.
Liquid class:	Combustible Liquid / Class IIIB (NFPA 30)
Storage temperature:	Dry, cool and well ventilated
▼Incompatible materials:	Strong acids Strong oxidizing agents Aluminium

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. **v** Control parameters

Occupational Exposure Limits hydroquinone 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]

Borax Pentahydrate Short term exposure limit (STEL) (ACGIH TLV) (ppm): 5 Long term exposure limit (OSHA Table Z-1) (mg/m³): 10 Long term exposure limit (NIOSH REL) (mg/m³): 5

Potassium hydroxide 45% Long term exposure limit (ACGIH TLV) (mg/m³): 2

diethanolamine Short term exposure limit (STEL) (NIOSH REL) (mg/m³): 15 Long term exposure limit (ACGIH TLV) (mg/m³): 1

Pyrocatechol Short term exposure limit (STEL) (NIOSH REL) (mg/m³): 20 Long term exposure limit (OSHA Table Z-1) (ppm): 20 Long term exposure limit (ACGIH TLV) (ppm): 5



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

8.2. ▼ Exposure controls

Good ventilations (typically 10 air changes per hour) should be uses. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation or other engineering controls to maintain airborne levels below recommended exposure limits. 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:

Туре	Class	Colour	Standards	
organic vapor/P95	P95			

Skin protection:

Recommended	Type/Category	Standards	
Dedicated work clothing should be worn.	-	-	R

Hand protection:



Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Gloves	-	-	EN374	
Eye protection:				
Туре	Standards			
Wear vapor-tight chemical goggle and a face shield.				E

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

	Physical state:	Liquid
	Colour:	Yellow
	Odour:	Amine
	Odour threshold (ppm):	No data available
	pH:	9.0
	▼pH in solution:	9.3 (%)
	▼ Density (g/cm³):	Testing not relevant or not possible due to the nature of the product.
	Relative density:	1.07
	Kinematic viscosity:	No data available
	Particle characteristics:	Not applicable - product is a liquid
Phase	changes	
	Melting point (°F):	Not applicable - product is a liquid
	Softening point/range (waxes and pastes) (°F):	Does not apply to liquids.
	▼ Boiling point (°F):	212
	Boiling point (°C):	100
	Vapour pressure:	18 millibar
	Relative vapour density:	0.6
	Decomposition temperature (°F):	No data available
	Evaporation rate (n-butylacetate = 100):	No data available
Data o	on fire and explosion hazards	
	▼ Flash point (°F):	200
	Flash point (°C):	93.3
	Flammability (°F):	Not applicable



Auto-ignition temperature (°F): Explosion limits (% v/v):	No data available No data available
Solubility	
Solubility in water:	Completely soluble
n-octanol/water coefficient (LogKow):	Testing not relevant or not possible due to the nature of the product.
Solubility in fat (g/L):	Testing not relevant or not possible due to the nature of the product.
9.2. Other information	
Dust explosion class:	St0 (No explosion)
Evaporation rate (n-butylacetate = 100):	No data available
Other physical and chemical parameters:	No data available.
Oxidizing properties:	Not applicable

SECTION 10: STABILITY AND REACTIVITY

10.1. ▼Reactivity

This product is stable and non-reactive under normal conditions of use, storage and transport.

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

Possibility of hazardous reactions 10.3. Hazardous polymerization does not occur.

10.4. Conditions to avoid

Incompatible with strong acids which may liberate sulphur dioxide. Mechanical influences (e.g. Shock, pressure, impact, friction). Fire, sparks or other ignition sources.

Keep away from heat.

10.5. ▼ Incompatible materials Strong acids. Strong oxidizing agents. Aluminum. Ammonia. Incompatible with strong acids which may liberate Sulphur dioxide.

10.6. ▼ Hazardous decomposition products Hazardous decomposition products: Sulphur oxides and Nitrogen oxides (NOx)

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

▼ Acute toxicity

Prolonged inhalation may be harmful. Mist or vapors irritating.

▼ Skin corrosion/irritation

Prolonged or repeated exposure may cause skin irritation. May cause an allergic skin reaction.

▼ Serious eye damage/irritation



Causes serious eye irritation.

▼ Respiratory sensitisation

Not a respiratory sensitizer.

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

May cause damage to organs (central nervous system, kidney, blood, liver) through prolonged or repeated exposure.

Aspiration hazard

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

▼ Long term effects

May cause damage to organs through prolonged or repeated exposure. May be harmful if absorbed through skin. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

Other information

Group 2B: Means that the agent is possibly carcinogenic to humans. Agents can be classified by IARC in Group 2b in several ways. Usually, a classification of Group 2B means that there is convincing evidence that the agent causes cancer in experimental animals but little or no information about whether it causes cancer in humans.

hydroquinone has been classified by IARC as a group 3 carcinogen.

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

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

Group 3: The agent is not classifiable as to its carcinogenicity to humans This category is used most commonly when the evidence of carcinogenicity in humans is inadequate, the evidence of carcinogenicity in experimental animals is limited (or inadequate), and the mechanistic evidence is limited (or inadequate).

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Very toxic to aquatic life with long lasting effects. (Hydroquinone (Cas 123-31-9)

- **12.2.** Persistence and degradability Readily biodegradable
- **12.3. Bioaccumulative potential** Partial coefficient n-octanol/water (log/Kow) for Hydroquinone 0.59
- **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

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warning potential) are expected from this component.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Treatment Methods: Product waste material must be disposed of in accordance with the national and local regulations. handle uncleaned containers like the product itself.

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

None of the components are listed

Specific labelling

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

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 information:
DOT	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (hydroquinone)	Transport hazard class: 9 Label: 9 Classification code: M6	III	No	Limited quantities: 5 L Tunnel restriction code: (-) See below for additional information.
IMDG	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (hydroquinone)	Transport hazard class: 9 Label: 9 Classification code: M6	III	No	Limited quantities: 5 L EmS: F-A S-F See below for additional information.
ΙΑΤΑ	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (hydroquinone)	Transport hazard class: 9 Label: 9 Classification code: M6	III	No	See below for additional information.



* Packing group

** Environmental hazards

Additional information

LIMITED QUANTITY EXEMPTION Not dangerous goods according to DOT, IATA and IMDG.

- **14.6.** Special precautions for user Not applicable.
- **14.7.** Transport in bulk according to Annex II of Marpol and the IBC Code No data available.

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture			
U.S. Federal regulations			
TSCA (the non-confidential portion):	Potassium Sulfite Solution 45% is listed hydroquinone is listed 2,2'-oxydiethanol is listed Potassium hydroxide 45% is listed sodium bromide is listed Dissolvine H-40 is listed diethanolamine is listed Dimezone S is listed Pyrocatechol is listed		
Clean Air Act:	hydroquinone is regulated as a hazardous air pollutant (HAPS) diethanolamine is regulated as a hazardous air pollutant (HAPS) Pyrocatechol is regulated as a hazardous air pollutant (HAPS)		
EPCRA Section 302:	hydroquinone is regulated with a Treshold Planning Quantity (TPQ) of: 500/10000 pounds		
EPCRA Section 304:	hydroquinone is regulated with a Reportable Quantity (RQ) of: 100 pounds		
EPCRA section 313:	hydroquinone is listed diethanolamine is listed Pyrocatechol is listed		
CERCLA:	hydroquinone is regulated with a Reportable Quantity (RQ) of: 100 pounds Potassium hydroxide 45% is regulated with a Reportable Quantity (RQ) of: 1000 pounds diethanolamine is regulated with a Reportable Quantity (RQ) of: 100 pounds Pyrocatechol is regulated with a Reportable Quantity (RQ) of: 100 pounds		
	or mixture U.S. Federal regulations TSCA (the non-confidential portion): Clean Air Act: EPCRA Section 302: EPCRA Section 304: EPCRA section 313:		

▼ State regulations



California / Prop. 65:	diethanolamine is known to cause: Cancer
	Pyrocatechol is known to cause: Cancer
▼ Massachusetts / Right To Know Act:	— Borax Pentahydrate is listed Potassium hydroxide 45% is listed diethanolamine is listed Pyrocatechol is listed
▼ New Jersey / Right To Know Act:	hydroquinone / Substance number: 1019
	Borax Pentahydrate / Substance number:
	Potassium hydroxide 45% / Substance number: 1571 Potassium hydroxide 45% is on the Special Health Hazard Substance List
	 sodium bromide / Substance number:
	 diethanolamine / Substance number: 0686 diethanolamine is on the Special Health Hazard Substance List
	Pyrocatechol / Substance number: 0722 Pyrocatechol is on the Special Health Hazard Substance List
New York / Right To Know Act:	 – hydroquinone is listed hydroquinone is regulated with a Reportable Quantity (RQ) of: 1 pounds hydroquinone is regulated with a Treshold Reporting Quantity (TRQ) of: 0 pounds hydroquinone 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.
	Potassium hydroxide 45% is listed Potassium hydroxide 45% is regulated with a Reportable Quantity (RQ) of: 1000 pounds Potassium hydroxide 45% is regulated with a Treshold Reporting Quantity (TRQ) of: 100 pounds
	diethanolamine is listed diethanolamine is regulated with a Reportable Quantity (RQ) of: 1 pounds diethanolamine is regulated with a Treshold Reporting Quantity (TRQ) of: 100 pounds
	 Pyrocatechol is listed Pyrocatechol is regulated with a Reportable Quantity (RQ)



of: 1 pounds Pyrocatechol is regulated with a Treshold Reporting Quantity (TRQ) of: 0 pounds

▼ Pennsylvania / Right To Know hydroquinone is listed hydroquinone is hazardous to the environment (E) Act:

2,2'-oxydiethanol is listed

Borax Pentahydrate is listed

Potassium hydroxide 45% is listed Potassium hydroxide 45% is hazardous to the environment (E)

sodium bromide is listed

diethanolamine is listed diethanolamine is hazardous to the environment (E)

Pyrocatechol is listed Pyrocatechol is hazardous to the environment (E)

▼ NFPA

Health hazard: 3 Fire hazard: 1 Instability hazard: 0

15.4. Restrictions for application

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

H290, May be corrosive to metals.

- H301, Toxic if swallowed.
- H302, Harmful if swallowed.
- H311, Toxic 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.

H335, May cause respiratory irritation.

H341, Suspected of causing genetic defects.

H350, May cause cancer.

H351, Suspected of causing cancer.

H360, May damage fertility or the unborn child.

H371, May cause damage to organs.

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

Validated by Photo Systems Inc./cf

Other

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

DISCLAIMER: The information contained in this Safety Data Sheet is correct to the best of our knowledge and experience at the time of publication. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. It is the user's responsibility to assure the proper use, storage and disposal of these materials to ensure the safety and health of the user and to protect the environment. Country-language: US-en