# *G153 (READY FOR USE)*

***SUBID:000000006585***

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## SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Identification of the substance or mixture:

| | | |
|---|---|---|
| Product name | : | G153 (READY FOR USE) |
| MSDS Number | : | 000000006585 |

### 1.2 Use of the substance/mixture:

| | | |
|---|---|---|
| Use of the Substance/Preparation | : | Photographic developer solution |
| Business group | : | MI |

### 1.3 Company/undertaking identification

Agfa Corporation
611 River Drive
Center 3
Elmwood Park, NJ 07407
U.S.A.

Transport Emergency

Call CHEMTREC : +1 800 4249300
International : +1 703 5273887

Non-transportation

Health Emergency Phone : +1 303 6235716
Agfa Information Phone : +1 201 4402500

## SECTION 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture:

| **GHS (Globally Harmonized System of Classification and Labelling of Chemicals)** | |
|---|---|
| • Hazard classes | Serious eye damage |
| Hazard categories | Category 1 |
| Hazard statements | H318 |
| • Hazard classes | Carcinogenicity |
| Hazard categories | Category 2 |
| Hazard statements | H351 |
| • Hazard classes | Skin sensitizer |
| Hazard categories | Category 1 |
| Hazard statements | H317 |
| • Hazard classes | Germ cell mutagenicity |
| Hazard categories | Category 2 |
| Hazard statements | H341 |
| • Hazard classes | Skin irritation |
| Hazard categories | Category 2 |
| Hazard statements | H315 |

**2.2 Label elements:**

Hazardous components which must be listed on the label :

Symbol(s)

GHS05

GHS08

GHS07

| | | | |
|---|---|---|---|
| Signal word | : | DANGER | |
| Hazard statements | : | H302 | Harmful if swallowed. |
| | | H315 | Causes skin irritation. |
| | | H317 | May cause an allergic skin reaction. |
| | | H318 | Causes serious eye damage. |
| | | H335 | May cause respiratory irritation. |
| | | H341 | Suspected of causing genetic defects. |
| | | H351 | Suspected of causing cancer. |
| Precautionary statements: prevention | : | P201 | Obtain special instructions before use. |
| | | P202 | Do not handle until all safety precautions have been read and understood. |
| | | P261 | Avoid breathing dust/fume/gas/mist/vapors/spray. |
| | | P264 | Wash ... thoroughly after handling. |
| | | P272 | Contaminated work clothing should not be allowed out of the workplace. |
| | | P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| Precautionary statements: response | : | P301+P330+P331 | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. |
| | | P302+P352 | IF ON SKIN: Wash with plenty of water/# |
| | | P308+P313 | IF exposed or concerned: Get medical advice/attention. |
| | | P333+P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| | | P362 | Take off contaminated clothing and wash before re-use. |
| | | P363 | Wash contaminated clothing before reuse. |
| Precautionary statements: storage | : | P405 | Store locked up. |

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Mixture related information:**

Aqueous photographic developer solution, mainly consisting of:

**3.2 Hazard ingredients:**

The hazard and labelling information in this section is that of the individual ingredients. The corresponding information relative to this product as supplied is given in section 2.1.

**Hazardous components**

- Potassium carbonate Concentration [%] : 1.0 - 5.0
  CAS-No. : 584-08-7
  Hazard classes : Serious eye irritationSkin irritationSpecific target organ toxicity - single exposure, Skin irritation, Specific target organ toxicity - single exposure
  Hazard categories : Category 2, Category 2, Category 3
  Hazard statements : H319, H315, H335
- Hydroquinone Concentration [%] : 1.0 - 5.0
  CAS-No. : 123-31-9
  Hazard classes : CarcinogenicityGerm cell mutagenicityAcute toxicity OralSerious eye damageSkin sensitizerAcute hazards to the aquatic environment, Germ cell mutagenicity, Acute toxicity Oral, Serious eye damage, Skin sensitizer, Acute hazards to the aquatic environment
  Hazard categories : Category 2, Category 2, Category 4, Category 1, Category 1, Category 1
  Hazard statements : H351, H341, H302, H318, H317, H400
- Potassium bromide Concentration [%] : 0.5
  CAS-No. : 7758-02-3
  Hazard classes : Serious eye irritation
  Hazard categories : Category 2
  Hazard statements : H319

**Components with a community workplace exposure limit**

- Diethylene glycol
- Hydroquinone

**3.3 Remark:**

Full text of each relevant H-phrase is listed in section 16.

## SECTION 4. FIRST AID MEASURES

**4.1 Description of first aid measures:**

Eye contact : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin contact : Wash immediately with plenty of water and soap. If symptoms persist, seek medical advice.

| | | |
|---|---|---|
| Ingestion | : | Rinse mouth with plenty of water. Seek medical advice. |
| Inhalation | : | Take person to fresh air. If necessary, seek medical advice. |

**4.2 Most important symptoms and effects:**

**4.3 Indication of immediate medical attention and special treatment needed:**

## SECTION 5. FIRE-FIGHTING MEASURES

**5.1 Extinguishing media**

| | | |
|---|---|---|
| Suitable extinguishing media | : | All extinguishing media are suitable. |

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

| | | |
|---|---|---|
| Further information | : | Product is not combustible. |

**5.3 Advice for fire-fighters:**

| | | |
|---|---|---|
| Special protective equipment for fire-fighters | : | Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes. |

## SECTION 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures:**

| | | |
|---|---|---|
| Personal precautions | : | See section : Exposure controls / personel protection. |
| Additional advice | : | Wash away residues with plenty of water. |

**6.2 Environmental precautions:**

| | | |
|---|---|---|
| Environmental precautions | : | For waste disposal see section 13. |

**6.3 Methods and material for containment and cleaning up:**

| | | |
|---|---|---|
| Methods for cleaning up | : | Dike the spill if necessary. Soak up with absorbent material. Collect large spills into a properly labelled and sealable container. Prevent release into the drain, soil or surface water. |

**6.4 Reference to other sections:**

For waste disposal see section 13.
For personal protection see section 8.

## SECTION 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling:**

| | | |
|---|---|---|
| Hygiene measures | : | Employees should wash their hands and face before eating, drinking, or using tobacco products.Educate and train employees in the safe use and handling of this product.Emergency showers and eye wash stations should be available. |
| Advice on protection against fire and explosion | : | No special protective measures against fire and explosion required. |

**7.2 Conditions for safe storage:**

| | | |
|---|---|---|
| Requirements for storage areas and containers | : | Keep container tightly closed. Protect from direct sunlight. |
| Advice on common storage | : | Store away from strong acids and strong oxidizing agents (e.g. sodium hypochlorite). |

**7.3 Specific end use:**

## SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**8.1 Control parameters:**

**8.1.1 Components with occupational exposure limits rsp. biological occupational exposure limits requiring monitoring:**

**8.1.1.1 Occupational exposure limits:**

**Air limit values (US)**

- Hydroquinone CAS-No.: 123-31-9

| Basis | Revision Date | Value | Type |
|---|---|---|---|
| ACGIH | 2008 | 1 mg/m3 | TWA |
| OSHA Z1 | 06 1993 | 2 mg/m3 | PEL |
| OSHA Z1A | 1989 | 2 mg/m3 | TWA |
| TN OEL | 06 2008 | 2 mg/m3 | TWA |

**Air limit values (CA)**

- Hydroquinone CAS-No.: 123-31-9

| Basis | Revision Date | Value | Type |
|---|---|---|---|
| OEL (QUE) | 12 2008 | 2 mg/m3 | TWA |
| CAD BC OEL | 07 2007 | 1 mg/m3 | TWA |
| CAD SK OEL | 05 2009 | 2 mg/m3 | 8 HR ACL |
| CAD SK OEL | 05 2009 | 4 mg/m3 | 15 MIN ACL |
| CAD MB OEL | 03 2011 | 1 mg/m3 | TWA |

**Biological limit values (US)**

We are not aware of any national exposure limit.

**Biological limit values (CA)**

We are not aware of any national exposure limit.

**8.1.1.2 Additional exposure limits under the conditions of use:**

**8.2 Exposure controls:**

**Occupational exposure controls:**

- **Instruction measures to prevent exposure:**

Employees should wash their hands and face before eating, drinking, or using tobacco products. Keep away from foodstuffs, drinks and tobacco.

- **Technical measures to prevent exposure:**

Ensure adequate ventilation.

- **Personal measures to prevent exposure:**

| | | |
|---|---|---|
| Respiratory protection | : | Under normal conditions of use, respirator protection is not required. If respirators are used, institute a program in accordance with OSHA standard 29CFR1910.134 or Canada CSA Standard Z94.4-02. |
| Hand protection | : | Use chemical resistant gloves. In case of prolonged immersion or frequently repeated contact use gloves made of the materials: butyl rubber (thickness >= 0.36 mm, breakthrough time > 480 min), nitrile rubber (thickness >= 0.38 mm, breakthrough time > 480 min) or neoprene (thickness >= 0.65 mm, breakthrough time > 240 min). For intermittent splash protection corresponding gloves with breakthrough times > 60 min can be used. Avoid gloves made of: natural latex. |
| Eye protection | : | Safety glasses. |
| Personal protective equipment | : | Educate and train employees in the safe use and handling of this product. Emergency showers and eye wash stations should be available. |

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

**9.1 Basic physical and chemical properties:**

**9.1.1 Appearance:**

| | | |
|---|---|---|
| State of matter | : | Liquid |
| Form | : | Liquid. |
| Color | : | Yellow |
| Odor | : | Odourless. |

| | | |
|---|---|---|
| Odor threshold | : | No data available |

**9.1.2 Important health, safety and environmental information:**

| | | |
|---|---|---|
| pH (25 °C) | : | 10.3 |
| Melting point/range | : | < 0 °C |
| Boiling point/range | : | > 100 °C |
| Flash point | : | > 93.33 °C<br>Not combustible. |
| Vapour pressure (20 °C) | : | 23.00 hPa |
| Relative density (20 °C) | : | 1.135 |
| Solubility/qualitative | : | Miscible with water at all ratios. |
| Water solubility | : | No data available |
| Partition coefficient (n-octanol/water) | : | No data available |
| Viscosity, dynamic | : | No data available |
| Viscosity, kinematic | : | No data available |
| Lower explosion limit | : | No data available |
| Upper explosion limit | : | No data available |
| Evaporation rate | : | No data available |
| Flammability (solid, gas) | : | Product is not combustible. |

**9.2 Other information:**

| | | |
|---|---|---|
| VOC content | : | 81.72 g/l<br>VOC content excluding water |

## SECTION 10. STABILITY AND REACTIVITY

**10.1 Reactivity:**

**10.2 Chemical stability:**

| | | |
|---|---|---|
| Stability | : | The product is stable under normal conditions of storage and use. |

**10.3 Possibility of hazardous reactions:**

**10.4 Conditions to avoid:**

| | | |
|---|---|---|
| Conditions to avoid | : | Avoid contact with strong acids and strong oxidizing agents (e.g. sodiumhypochlorite). Remove all chemicals and rinse the processing tanks thoroughly with water before using any cleansing products. |

**10.5 Materials to avoid:**

**10.6 Hazardous decomposition products:**

| | | |
|---|---|---|
| Hazardous decomposition | : | None |

products

## SECTION 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

Possible risk of irreversible effects.
Limited evidence of a carcinogenic effect.
May cause sensitization by skin contact.

Toxicity data specific for individual ingredients in their pure state:

**Toxicokinetics, metabolism and distribution:**

- Potassium carbonate

No data available

- Hydroquinone

Toxicokinetic studies with hydroquinone show that although it is readily absorbed from the gut of animals it has a low potential for bioaccumulation (< 2% distributed out of total administered dose). Extensive conjugation and rapid excretion, primarily via the urine, suggests that hydroquinone is effectively detoxified.
However, because hydroquinone is oxidized to p-benzosemiquinone and/or p-benzoquinone, which are able to readily react with nucleophilic body components, it represents a potentially harmful toxicant. Indeed, hydroquinone and/or its metabolites covalently bind to cellular components in vitro.
It is, therefore, possible that although the bioaccumulation potential of hydroquinone is low critical body components may still be adversely affected.

- Potassium bromide

No data available

**Acute effects (toxicity tests):**

➢ **Acute Toxicity**

- Potassium carbonate

| | Effect dose | Species | Value | Method |
|---|---|---|---|---|
| Acute oral toxicity | LD50 | rat | > 2,000 mg/kg | Literature. |
| | Based on available data, the classification criteria are not met. | | | |
| Acute dermal toxicity | LD50 | rabbit | 2,000 mg/kg | Literature. |
| | Based on available data, the classification criteria are not met. | | | |
| Acute inhalation toxicity | | | | Literature. |
| | Irritating to respiratory system. | | | |

- Hydroquinone

| | Effect dose | Species | Value | Method |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| Acute oral toxicity | LD50 | rat | 320 mg/kg | Literature. |
| Acute dermal toxicity | LD50 | cat | 5,970 mg/kg | Literature. |
| | Based on available data, the classification criteria are not met. | | | |
| Acute inhalation toxicity | It was demonstrated that during intended and foreseen applications, no respirable aerosol is formed. Inhalation of airborne droplets may cause irritation of the respiratory tract. | | | |

- Potassium bromide

| | Effect dose | Species | Value | Method |
|---|---|---|---|---|
| Acute oral toxicity | LD50 | rat | 3,070 mg/kg | Literature. |
| | Based on available data, the classification criteria are not met. | | | |
| Acute dermal toxicity | No data available | | | |
| Acute inhalation toxicity | No data available | | | |

➢ **Specific target organ toxicity (STOT):**

- Potassium carbonate

| Specific effects | Affected organs |
|---|---|
| May cause irritation of respiratory tract. | |

- Hydroquinone

| Specific effects | Affected organs |
|---|---|
| Product dust may be irritating to eyes, skin and respiratory system. | |

- Potassium bromide

| Specific effects | Affected organs |
|---|---|
| No data available | |

➢ **Irritant and corrosive effects:**

- Potassium carbonate

| | Exposure time | Species | Evaluation | Method |
|---|---|---|---|---|
| Primary irritation to the skin | | | | Literature. |
| | Irritating to skin. | | | |
| Irritation to eyes | | | | Literature. |
| | Irritating to eyes. | | | |

- Hydroquinone

| | Exposure time | Species | Evaluation | Method |
|---|---|---|---|---|
| Primary irritation to the skin | | | No skin irritation | Tested according to |

| | | | |
|---|---|---|---|
| | | | Annex V of Directive 67/548/EEC. |
| | According to the classification criteria of the European Union, the product is not considered as being a skin irritant. | | |
| Irritation to eyes | | Risk of serious damage to eyes. | Tested according to Annex V of Directive 67/548/EEC. |

- Potassium bromide

| | Exposure time | Species | Evaluation | Method |
|---|---|---|---|---|
| Primary irritation to the skin | Based on available data, the classification criteria are not met. | | | |
| Irritation to eyes | | | Severe eye irritation. | Literature. |

➢ **Irritation to the respiratory tract:**

- Potassium carbonate

May cause irritation of respiratory tract.

- Hydroquinone

No data available

- Potassium bromide

No data available

➢ **Sensitisation:**

- Potassium carbonate

| Species | Evaluation | Method |
|---|---|---|
| | Did not cause sensitization on laboratory animals. | Literature. |

- Hydroquinone

| Species | Evaluation | Method |
|---|---|---|
| | May cause sensitisation by skin contact. | Tested according to Annex V of Directive 67/548/EEC. |

- Potassium bromide

| Species | Evaluation | Method |
|---|---|---|
| | No data available | |

➢ **Aspiration hazard:**

- Potassium carbonate

No data available

- Hydroquinone

No data available

- Potassium bromide

No data available

**Sub-acute, sub-chronic and chronic toxicity**

➢ **Repeated dose toxicity:**

- Potassium carbonate

No data available

- Hydroquinone

No data available

- Potassium bromide

No data available

➢ **Specific target organ toxicity (STOT):**

- Potassium carbonate

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

- Hydroquinone

Skin contact can cause (damage skin and allergic reaction) eczema. Hydroquinione can affect the bone marrow and other blood-producing organs, resulting in reduction of red blood cells and blood dye concentrations. Discoloration of the skin may occur. There is evidence that hydroquinone is carcinogenic. May damage the genetic characteristics.

- Potassium bromide

No information available.

➢ **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction):**

- **Carcinogenicity**

- Potassium carbonate

| Route of exposure | Species | Exposure time |
|---|---|---|
| | Method: Literature.<br>No carcinogenic effects observed at the doses tested. | |

- Hydroquinone

Formation of benign kidney tumors occurred only after nephropathy developed and only in one strain of male rat. Additional effects have been reported. Although an increase in leukemia was reported in the female F-344 rat, this result was not reproduced in a subsequent study. There was no evidence of cancer in male mice following chronic oral administration. Increases in primarily benign tumors were noted in female mice, although this finding was not reproduced in a subsequent study. No tumors were reported in mice following long-term dermal application.

- Potassium bromide

No data available

- **Mutagenicity**

- Potassium carbonate

There is no evidence for mutagenicity from studies in animals.

- Hydroquinone

Studies using the 'Ames' test were generally negative.There is some evidence for mutagenicity from studies in animals, in isolated cells taken from animals and plants, and in other microorganisms.

- Potassium bromide

No data available

- **Genetic toxicity in vitro**

- Potassium carbonate

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

- Hydroquinone

| Type | Test system | Concentration | Result |
|---|---|---|---|
| Ames test | Escherichia coli WP2 uvr A; Salmonella typhimurium TA98, TA100, TA535, TA1537 Method: Literature. | | negative |

- Potassium bromide

No data available

- **Genetic toxicity in vivo**

- Potassium carbonate

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

- Hydroquinone

No data available

- Potassium bromide

No data available

- **Teratogenicity**

- Potassium carbonate

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

- Hydroquinone

Has not caused birth defects when administered orally at dose levels not causing systemic toxicity in the mother.

- Potassium bromide

No data available

- **Toxicity to reproduction**

- Potassium carbonate

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

- Hydroquinone

Has not caused reproductive effects in male or female animals when administered orally at dose levels not causing systemic toxicity

- Potassium bromide

No data available

➢ **Summarised evaluation of the CMR properties:**

- Potassium carbonate

| | | |
|---|---|---|
| Carcinogenicity | : | Animal testing did not show any carcinogenic effects. |
| Mutagenicity | : | Did not show mutagenic effects in animal experiments. |
| Teratogenicity | : | Based on available data, the classification criteria are not met. |
| Toxicity to reproduction | : | Based on available data, the classification criteria are not met. |

- Hydroquinone

| | | |
|---|---|---|
| Carcinogenicity | : | Considered as a suspected human carcinogen according to the American Conference of Industrial Hygienists (ACGIH). |
| Mutagenicity | : | Tests on bacterial or mammalian cell cultures did not show mutagenic effects. |
| Teratogenicity | : | Did not show teratogenic effects in animal experiments. |
| Toxicity to reproduction | : | No toxicity to reproduction |

- Potassium bromide

| | | |
|---|---|---|
| Carcinogenicity | : | No data available |
| Mutagenicity | : | No data available |
| Teratogenicity | : | No data available |
| Toxicity to reproduction | : | No data available |

**Experiences made in practice:**

There is insufficient scientific evidence for classifying hydroquinone as a suspected carcino- or mutagenic substance in humans. Epidemiologic studies over a period of 48 years, wherin -during manufacturing and use of hydroquinone- more than 800 human individuals were daily exposed at significant airborne concentrations (greater than the occupational threshold of 2 mg/m³), demonstrated that such exposure is not associated with the induction of cancer in humans.

## SECTION 12. ECOLOGICAL INFORMATION

### 12.1 Ecotoxicity:

- Potassium carbonate

| | Effect dose | Exposure time | Species | Value |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| Toxicity to fish | LC50 | 96 h | Pimephales promelas (fathead minnow) | > 100 mg/l |
| | Method: Literature. | | | |
| Toxicity to fish | LC50 | 96 h | Oncorhynchus mykiss (rainbow trout) | 68 mg/l |
| | Method: Literature. | | | |
| Toxicity to daphnia | EC50 | 48 h | Daphnia magna | 430 mg/l |
| | Method: Literature. | | | |

- Hydroquinone

| | Effect dose | Exposure time | Species | Value |
|---|---|---|---|---|
| Toxicity to fish | LC50 | 96 h | Brachidanio rerio (zebra fish) | 0.11 to 0.64 mg/l |
| Toxicity to daphnia | EC50 | 48 h | Daphnia magna (water flea) | 0.3 mg/l |
| Toxicity to algae | EC50 | 72 h | Selenastrum capricornutum (algae) | 0.3 mg/l |
| Toxicity to bacteria | No data available | | | |

- Potassium bromide

| | Effect dose | Exposure time | Species | Value |
|---|---|---|---|---|
| Toxicity to fish | LC50 | | Salmo gairdneri (rainbow trout) | 3,200 mg/l |
| | Method: Literature. | | | |
| | Based on available data, the classification criteria are not met. | | | |
| Toxicity to daphnia | EC50 | 48 h | Daphnia magna | > 100 mg/l |
| | Method: Literature. | | | |
| | Based on available data, the classification criteria are not met. | | | |
| Toxicity to algae | No data available | | | |
| Toxicity to bacteria | No data available | | | |

**12.2 Persistence and degradability:**

**Physico-chemical removability**

- Potassium carbonate

No data available

- Hydroquinone

The product can be eliminated from water by abiotic processes, e.g. adsorption on activated sludge.

- Potassium bromide

No data available

**Chemical Oxygen Demand (COD)**

| Value | Method |
|---|---|
| 170,000 mg/l | |

**Adsorbed organic bound halogens (AOX)**

- Potassium carbonate

Product does not contain any organic halogens.

- Hydroquinone

Product does not contain any organic halogens.

- Potassium bromide

Product does not contain any organic halogens.

**Biodegradation**

- Potassium carbonate

inorganic substances in powdered form

- Hydroquinone

| Value | Exposure time | Method | Evaluation |
|---|---|---|---|
| > 80 % | 28 d | OECD 301D Readily biodegradable | According to the results of tests of biodegradability this product is considered as being readily biodegradable. |

- Potassium bromide

The methods for determining biodegradability are not applicable to inorganic substances.

**Biochemical Oxygen Demand (BOD)**

| Concentration | Incubation time | Value | Method |
|---|---|---|---|
| | | 10,000 mg/l | |

**12.3 Bioaccumulative potential:**

**Partition coefficient (n-octanol/water)**

No data available

**Bioconcentration factor (BCF)**

- Potassium carbonate

Does not bioaccumulate.

- Hydroquinone

| Value | Species | Method |
|---|---|---|
| 40 | | Literature. Bioaccumulation is unlikely. Accumulation in aquatic organisms is unlikely. Accumulation in terrestrial organisms is unlikely. |

- Potassium bromide

Bioaccumulation is unlikely.

**12.4 Mobility in soil:**

- Potassium carbonate

Soluble in water.

- Hydroquinone

This product will show high soil mobility and will be degraded through photolysis and oxidation processes from the ambient atmosphere on the surface.Volatilization of hydroquinone from either moist or dry soil is not expected to occur to any significant extent.

- Potassium bromide

Soluble in water.

**Henry's constant**

- Potassium carbonate

| Value | Temperature | Method |
|---|---|---|
| | | No information available. |

- Hydroquinone

| Value | Temperature | Method |
|---|---|---|
| < 0.000134 hPa | 25 °C | |

- Potassium bromide

| Value | Temperature | Method |
|---|---|---|
| | | No information available. |

**Transport between environmental compartments**

- Potassium carbonate

Transport between environmental compartments can be expected.

- Hydroquinone

| Type | Medium | Value Method |
|---|---|---|
| | | Koc: 9<br>Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination. Transport between environmental compartments can be expected. |

- Potassium bromide

No data available

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

- Potassium carbonate

This product does not meet the criteria concerning PBT or vPvB substances as described in Annex XIII of the REACH regulation (1907/2006 EC)

- Hydroquinone

This product does not meet the criteria concerning PBT or vPvB substances as described in Annex XIII of the REACH regulation (1907/2006 EC)

- Potassium bromide

This product does not meet the criteria concerning PBT or vPvB substances as described in Annex XIII of the REACH regulation (1907/2006 EC)

**12.6 Other adverse effects:**

- Potassium carbonate

This substance is not in Annex I of Regulation (EC) 2037/2000 on substances that deplete the ozone layer. Neutralization will reduce ecotoxic effects. When properly applied, negative effects on the functionality of waste treatment plants are not expected.

- Hydroquinone

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Avoid infiltration in to drinking supplies, waste water or soil.

- Potassium bromide

This substance is not in Annex I of Regulation (EC) 2037/2000 on substances that deplete the ozone layer. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

## SECTION 13. DISPOSAL CONSIDERATIONS

**Waste disposal methods**

Waste disposal should be in accordance with existing federal, state and local environmental control laws. Discharge to sewer may require approval of permitting authority and may require pretreatment.

**US. RCRA Hazardous Waste Classification (40 CFR 261)**

## SECTION 14. TRANSPORT INFORMATION

Not regulated according to IMO/IMDG.
Not regulated according to ICAO/IATA aircraft only.
Not regulated according to ICAO/IATA passenger and cargo aircraft.
Not Regulated according to US Department of Transportation (DOT) 49 CFR
Not regulated according to Transport of Dangerous Goods (TDG)

## SECTION 15. REGULATORY INFORMATION

**US. Toxic Substances Control Act (TSCA)**

All of the components of this product are listed on the TSCA Inventory.

**US. OSHA Classification**

This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

**US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)**

- Hydroquinone : Threshold planning quantity, lower value: 500 lbs
- : Threshold planning quantity, upper value: 10,000 lbs

**US. SARA 311/312 Hazard Categories**

Immediate Health Hazard.

**US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required**

- Hydroquinone : De minimis concentration: 1.0 %
- : Reportable threshold: 10,000 lbs
- : Reportable threshold: 25,000 lbs

**US. EPA CERCLA Hazardous Substances (40 CFR 302)**

- Hydroquinone : Reportable quantity: 100 lbs

**US. California Prop. 65**

This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other harm.

**State Right-to-Know Information**

The following chemicals are specifically listed by individual states. Other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

**US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)**

| | CAS-No. | Concentration [%] |
|---|---|---|
| • Hydroquinone | 123-31-9 | >= 1.0 - <= 5.0 |

**US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)**

| | CAS-No. | Concentration [%] |
|---|---|---|
| • Hydroquinone | 123-31-9 | >= 1.0 - <= 5.0 |

**US. Rhode Island Hazardous Substances Right-to-Know Act (R.I. Gen. Laws Section 28-21-1 et. seq.)**

| | CAS-No. | Concentration [%] |
|---|---|---|
| • Hydroquinone | 123-31-9 | >= 1.0 - <= 5.0 |

**US. Massachusetts, New Jersey, Pennsylvania or Rhode Island Right to Know Substance Lists :** See Section 2.

**Canadian WHMIS Classification**

D1B : Toxic Material Causing Immediate and Serious Toxic Effects
D2A : Very toxic material causing other toxic effects
E : Corrosive material

**Canadian Environmental Protection Act (CEPA)**

All components of this product are on the Canadian DSL list.

## SECTION 16. OTHER INFORMATION

**Text of H-phrases referred to under headings 2 and 3:**

| | |
|---|---|
| H302 | Harmful if swallowed. |
| 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. |
| H351 | Suspected of causing cancer. |
| H400 | Very toxic to aquatic life. |

This MSDS is replacing Agfa MSDS number 202TRFU

**This information is furnished without warranty, expressed or implied, and is believed to be accurate to the best knowledge of Agfa Corporation. The data on this SDS relates only to the specific material designated herein. Agfa Corporation assumes no legal responsibility for use or reliance upon these data. This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.**