

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

**1.1. Product identifier**

**Trade name or designation of the mixture** MAJIREL GLOW PERMANENT HAIR COLOURS - GROUP 6  
**Synonyms** None.  
**SDS number** 00-21-0000228  
**Issue date** 04-18-2019  
**Version number** 01

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

**Identified uses** Personal care product used for cosmetic effect.  
**Uses advised against** None known.

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

**Address** Productos Capilares L'Oreal SA  
 Poligono Industrial de Villalonguejar - Calle López Bravo - 78 Apartado 517  
 Burgos 09001  
 Spain

**Emergency Phone # :** + 34 947 258 300

**For further information:** +1-732-499-2741

**SECTION 2: Hazards identification**

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

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

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

**Health hazards**

Skin corrosion/irritation	Category 2	H315 - Causes skin irritation.
Serious eye damage/eye irritation	Category 1	H318 - Causes serious eye damage.
Skin sensitization	Category 1A	H317 - May cause an allergic skin reaction.

**Environmental hazards**

Hazardous to the aquatic environment, long-term aquatic hazard	Category 2	H411 - Toxic to aquatic life with long lasting effects.
--	------------	---

**Hazard summary**

Causes serious eye damage. Causes skin irritation. May cause an allergic skin reaction. Dangerous for the environment if discharged into watercourses. Occupational exposure to the substance or mixture may cause adverse health effects. This is a consumer care product that is safe for consumers when used according to the label directions. Like many consumer products, a small number of individuals may experience reactions such as redness, rash and / or swelling upon prolonged or repeated skin contact or eye contact.

**2.2. Label elements**

**Label according to Regulation (EC) No. 1272/2008 as amended**

**Contains:** 2,4-DIAMINOPHENOXYETHANOL HCL, 2-METHYLRESORCINOL, 4-AMINO-2-HYDROXYTOLUENE, 4-amino-m-cresol, 6-HYDROXYINDOLE, AMMONIUM HYDROXIDE, BASIC ORANGE 31, M-AMINOPHENOL, N,N-BIS(2-HYDROXYETHYL)-p-PHENYLENEDIAMINE SULFATE, P-AMINOPHENOL, RESORCINOL, TOLUENE-2,5-DIAMINE

**Hazard pictograms**



**Signal word** Danger

**Hazard statements**

H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements**

**Prevention**

P102 Keep out of reach of children.  
P103 Read label before use.  
P260 Do not breathe vapor.  
P264 Wash thoroughly after handling.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P273 Avoid release to the environment.  
P280 Wear eye protection/face protection.  
P280 Wear protective gloves.

**Response**

P101 If medical advice is needed, have product container or label at hand.  
P302 + P352 IF ON SKIN: Wash with plenty of water.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER/doctor.  
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.  
P362 + P364 Take off contaminated clothing and wash it before reuse.  
P391 Collect spillage.

**Storage**

Store away from incompatible materials.

**Disposal**

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Supplemental label information**

5,4% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 12,29% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

**2.3. Other hazards**

None known.

**SECTION 3: Composition/information on ingredients**

**3.2. Mixtures**

**General information**

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
AMMONIUM HYDROXIDE	3,29	1336-21-6 215-647-6	01-2119982985-14	007-001-01-2	#
<b>Classification:</b>		Acute Tox. 4;H302, Skin Corr. 1B;H314, Eye Dam. 1;H318, STOT SE 3;H335, Aquatic Acute 1;H400			
HEXADIMETHRINE CHLORIDE	3	68393-49-7 672-780-6	-	-	
<b>Classification:</b>		Aquatic Chronic 1;H410			
TOLUENE-2,5-DIAMINE	1,78	95-70-5 202-442-1	01-2120136877-44	612-125-00-3	
<b>Classification:</b>		Acute Tox. 3;H301, Acute Tox. 4;H312, Skin Sens. 1A;H317, Eye Dam. 1;H318, Acute Tox. 4;H332, Aquatic Chronic 2;H411			
RESORCINOL	1,68	108-46-3 203-585-2	01-2119480136-40	604-010-00-1	#
<b>Classification:</b>		Acute Tox. 4;H302, Skin Irrit. 2;H315, Skin Sens. 1A;H317, Eye Irrit. 2;H319, STOT SE 1;H370, Aquatic Acute 1;H400, Aquatic Chronic 3;H412			
2,4-DIAMINOPHENOXYETHANOL HCL	0,35	66422-95-5 266-357-1	01-2120011817-60	-	
<b>Classification:</b>		Acute Tox. 4;H302, Skin Sens. 1B;H317, Eye Irrit. 2;H319, Aquatic Chronic 2;H411			

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
M-AMINOPHENOL	0,32	591-27-5 209-711-2	01-2119930678-27	612-127-00-4	
<b>Classification:</b>	Acute Tox. 4;H302, Skin Sens. 1A;H317, Acute Tox. 4;H332, Aquatic Chronic 2;H411				
P-AMINOPHENOL	0,27	123-30-8 204-616-2	01-2119535388-31	612-128-00-X	
<b>Classification:</b>	Acute Tox. 4;H302, Skin Sens. 1;H317, Acute Tox. 4;H332, Muta. 2;H341, Aquatic Chronic 1;H410				
2-METHYLRESORCINOL	0,26	608-25-3 210-155-8	01-2120030526-64	-	
<b>Classification:</b>	Acute Tox. 3;H301, Skin Sens. 1B;H317, Eye Dam. 1;H318, STOT SE 3;H335, Aquatic Acute 1;H400				
BASIC RED 51	0,26	77061-58-6 278-601-4	-	-	
<b>Classification:</b>	Acute Tox. 4;H302, Eye Irrit. 2;H319, Aquatic Chronic 1;H410				
4-AMINO-2-HYDROXYTOLUENE	0,22	2835-95-2 220-618-6	01-2120766272-54	-	
<b>Classification:</b>	Skin Sens. 1A;H317, Aquatic Chronic 2;H411				
BASIC ORANGE 31	0,13	97404-02-9 306-764-4	-	-	
<b>Classification:</b>	Acute Tox. 4;H302, Skin Sens. 1A;H317, Eye Dam. 1;H318, Aquatic Chronic 2;H411				
N,N-BIS(2-HYDROXYETHYL)-p-PHE NYLENEDIAMINE SULFATE	0,11	54381-16-7 259-134-5	01-2120762993-40	-	
<b>Classification:</b>	Acute Tox. 3;H301, Skin Sens. 1A;H317, Eye Irrit. 2;H319, Aquatic Acute 1;H400, Aquatic Chronic 2;H411				

#### List of abbreviations and symbols that may be used above

#: This substance has been assigned Union workplace exposure limit(s).

M: M-factor

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

**Composition comments** The full text for all H-statements is displayed in section 16.

## SECTION 4: First aid measures

**General information** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

### 4.1. Description of first aid measures

**Inhalation** Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact** Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.

**Eye contact** Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

**Ingestion** Rinse mouth. Get medical attention if symptoms occur.

**4.2. Most important symptoms and effects, both acute and delayed** Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

**4.3. Indication of any immediate medical attention and special treatment needed** Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

## SECTION 5: Firefighting measures

**General fire hazards** No unusual fire or explosion hazards noted.

- 5.1. Extinguishing media**  
**Suitable extinguishing media** Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).  
**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.
- 5.2. Special hazards arising from the substance or mixture** During fire, gases hazardous to health may be formed.
- 5.3. Advice for firefighters**  
**Special protective equipment for firefighters** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.  
**Special fire fighting procedures** Move containers from fire area if you can do so without risk.
- Specific methods** Use standard firefighting procedures and consider the hazards of other involved materials.

## SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures**  
**For non-emergency personnel** Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.  
**For emergency responders** Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.
- 6.2. Environmental precautions** Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.
- 6.3. Methods and material for containment and cleaning up**  
 Prevent product from entering drains.  
 Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.  
 Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.  
 Never return spills to original containers for re-use.
- 6.4. Reference to other sections** For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

## SECTION 7: Handling and storage

- 7.1. Precautions for safe handling** Do not breathe vapor. Do not get this material in contact with eyes. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.
- 7.2. Conditions for safe storage, including any incompatibilities** Store in original tightly closed container. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).
- 7.3. Specific end use(s)** Not available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

##### Belgium. Exposure Limit Values.

Components	Type	Value
RESORCINOL (CAS 108-46-3)	STEL	91 mg/m3
	TWA	20 ppm
		46 mg/m3
		10 ppm

##### France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

Components	Type	Value
AMMONIUM HYDROXIDE (CAS 1336-21-6)	VLE	14 mg/m3
	VME	20 ppm
		7 mg/m3

**France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984**

Components	Type	Value
RESORCINOL (CAS 108-46-3)	VME	10 ppm
		45 mg/m3
		10 ppm

**Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace**

Components	Type	Value	Form
AMMONIUM HYDROXIDE (CAS 1336-21-6)	AGW	14 mg/m3	
RESORCINOL (CAS 108-46-3)	AGW	20 ppm	Inhalable fraction.
		20 mg/m3	
		4 ppm	

**Italy. Occupational Exposure Limits**

Components	Type	Value
AMMONIUM HYDROXIDE (CAS 1336-21-6)	STEL	36 mg/m3
		50 ppm
		14 mg/m3
RESORCINOL (CAS 108-46-3)	TWA	20 ppm
		45 mg/m3
		10 ppm

**Poland. MACs. Regulation regarding maximum permissible concentrations and intensities of harmful factors in the work environment, Annex 1**

Components	Type	Value	Form
AMMONIUM HYDROXIDE (CAS 1336-21-6)	STEL	28 mg/m3	
	TWA	14 mg/m3	
P-AMINOPHENOL (CAS 123-30-8)	TWA	5 mg/m3	Inhalable fraction.
RESORCINOL (CAS 108-46-3)	STEL	90 mg/m3	
	TWA	45 mg/m3	

**Spain. Occupational Exposure Limits**

Components	Type	Value
AMMONIUM HYDROXIDE (CAS 1336-21-6)	STEL	36 mg/m3
		50 ppm
		14 mg/m3
RESORCINOL (CAS 108-46-3)	TWA	20 ppm
		46 mg/m3
		10 ppm

**EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU**

Components	Type	Value
AMMONIUM HYDROXIDE (CAS 1336-21-6)	STEL	36 mg/m3
		50 ppm
		14 mg/m3
RESORCINOL (CAS 108-46-3)	TWA	20 ppm
		45 mg/m3
		10 ppm

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Recommended monitoring procedures** Follow standard monitoring procedures.

**Derived no effect levels (DNELs)** Not available.

**Predicted no effect concentrations (PNECs)** Not available.

## Exposure guidelines

### EU Exposure Limit Values: Skin designation

RESORCINOL (CAS 108-46-3)

Can be absorbed through the skin.

### Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

RESORCINOL (CAS 108-46-3)

Can be absorbed through the skin.

## 8.2. Exposure controls

### Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. 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. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station. Eye wash fountain and emergency showers are recommended.

### Individual protection measures, such as personal protective equipment

#### General information

Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

#### Eye/face protection

Wear safety glasses with side shields (or goggles) and a face shield. Face shield is recommended.

#### Skin protection

##### - Hand protection

Wear appropriate chemical resistant gloves.

##### - Other

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

#### Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

#### Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

### Hygiene measures

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

### Environmental exposure controls

Inform appropriate managerial or supervisory personnel of all environmental releases.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

#### Appearance

##### Physical state

Liquid.

##### Color

Shaded

#### Odor

Not available. Characteristic.

#### Odor threshold

Not available.

#### pH

10

#### Melting point/freezing point

Not available.

#### Initial boiling point and boiling range

> 212 °F (> 100 °C)

#### Flash point

> 212,0 °F (> 100,0 °C) Closed Cup

#### Evaporation rate

Not available.

#### Flammability (solid, gas)

Not applicable.

#### Upper/lower flammability or explosive limits

##### Flammability limit - lower (%)

Not available.

##### Flammability limit - upper (%)

Not available.

#### Vapor pressure

Not available.

#### Vapor density

Not available.

#### Relative density

Not available.

#### Solubility(ies)

##### Solubility (water)

Not available.

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

Not available.

#### Auto-ignition temperature

Not available.

#### Decomposition temperature

Not available.

Viscosity	Not available.
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

## 9.2. Other information

Density	0,970 g/cm <sup>3</sup>
---------	-------------------------

## SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Contact with incompatible materials.
10.5. Incompatible materials	Strong oxidizing agents.
10.6. Hazardous decomposition products	No hazardous decomposition products are known.

## SECTION 11: Toxicological information

**General information** Occupational exposure to the substance or mixture may cause adverse effects.

### Information on likely routes of exposure

<b>Inhalation</b>	May cause allergy or asthma symptoms or breathing difficulties if inhaled. Prolonged inhalation may be harmful.
<b>Skin contact</b>	Causes skin irritation. May cause an allergic skin reaction.
<b>Eye contact</b>	Causes serious eye damage.
<b>Ingestion</b>	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

**Symptoms** Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

### 11.1. Information on toxicological effects

**Acute toxicity** Not known.

Components	Species	Test Results
2,4-DIAMINOPHENOXYETHANOL HCL (CAS 66422-95-5)		
<u>Acute</u>		
<b>Oral</b>		
LD50	Rat	1000 mg/kg OECD 401
2-METHYLRESORCINOL (CAS 608-25-3)		
<u>Acute</u>		
<b>Oral</b>		
LC50	Rat	200 mg/kg
4-AMINO-2-HYDROXYTOLUENE (CAS 2835-95-2)		
<u>Acute</u>		
<b>Oral</b>		
LD50	Rat	3600 mg/kg
AMMONIUM HYDROXIDE (CAS 1336-21-6)		
<u>Acute</u>		
<b>Inhalation</b>		
LC50	Rat	11590 mg/l, 1 h
<b>Oral</b>		
LD50	Rat	350 mg/kg bw OECD 401
BASIC ORANGE 31 (CAS 97404-02-9)		
<u>Acute</u>		
<b>Dermal</b>		
LD50	Rat	> 2000 mg/kg OECD 402
<b>Oral</b>		
LD50	Rat	1278 mg/kg

Components	Species	Test Results
BASIC RED 51 (CAS 77061-58-6)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rat	> 2000 mg/kg OECD 402
<b>Oral</b>		
LD50	Rat	> 1000 mg/kg
HEXADIMETHRINE CHLORIDE (CAS 68393-49-7)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg OECD 402
<b>Oral</b>		
LD50	Rat	> 2000 mg/kg OECD 420
M-AMINOPHENOL (CAS 591-27-5)		
<b>Acute</b>		
<b>Inhalation</b>		
LC50	Rat	1162 mg/m3
<b>Oral</b>		
LD50	Rat	924 mg/kg
N,N-BIS(2-HYDROXYETHYL)-p-PHENYLENEDIAMINE SULFATE (CAS 54381-16-7)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	264 mg/kg
P-AMINOPHENOL (CAS 123-30-8)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 8000 mg/kg EPA OPTTS 870.1200
<b>Inhalation</b>		
<i>Dust</i>		
LC50	Rat	> 3,42 mg/l, 4 h OECD 403
<b>Oral</b>		
LD50	Rat	671 mg/kg EPA OPPTS 870.1100
RESORCINOL (CAS 108-46-3)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	2830 mg/kg FHSL Act
<b>Inhalation</b>		
<i>Aerosol</i>		
LC0	Rat	> 7800 mg/m <sup>3</sup> , 1 h FHSL Act
<b>Oral</b>		
LD50	Rat	510 mg/kg OECD 401
TOLUENE-2,5-DIAMINE (CAS 95-70-5)		
<b>Oral</b>		
LD50	Rat	102 mg/kg OECD 401
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	3520 mg/kg
<b>Inhalation</b>		
<i>Dust</i>		
LC50	Rat	0,99 mg/l, 4 h

\* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation** Causes skin irritation.



**Irritation Corrosion - Skin**

RESORCINOL	FHLS Act, (100%) Result: Irritating Species: Rabbit
AMMONIUM HYDROXIDE	OECD 404 Result: Corrosive Species: Rat
HEXADIMETHRINE CHLORIDE	OECD 404 Result: Not Irritating
2,4-DIAMINOPHENOXYETHANOL HCL	OECD 404 Result: Not Irritating Species: Rabbit
BASIC ORANGE 31	OECD 404 Result: Not Irritating Species: Rabbit
BASIC RED 51	OECD 404 Result: Not Irritating Species: Rabbit
M-AMINOPHENOL	OECD 404 Result: Not Irritating Species: Rabbit
2-METHYLRESORCINOL	OECD 404 Result: Slightly Irritating Species: Rabbit
RESORCINOL	OECD 404, (2,5%) Result: Not Irritating Species: Rabbit
N,N-BIS(2-HYDROXYETHYL)-p-PHENYLENEDIAMINE SULFATE	OECD 439 Result: Not Irritating Species: In vitro
TOLUENE-2,5-DIAMINE	OECD 439 Result: Not Irritating Species: In vitro
4-AMINO-2-HYDROXYTOLUENE	OECD 439 Result: Not Irritating Species: RhE
P-AMINOPHENOL	Result: Slightly Irritating Species: Rabbit

**Serious eye damage/eye irritation**

Causes serious eye damage.

**Irritation Corrosion - Eye**

P-AMINOPHENOL	EPA OPPTS 870,2400 Result: Slightly Irritating Species: Rabbit
RESORCINOL	FHLS Act, (100%) Result: Corrosive Species: Rabbit
2-METHYLRESORCINOL	OECD 405 Result: Corrosive Species: Rabbit
BASIC ORANGE 31	OECD 405 Result: Corrosive Species: Rabbit
TOLUENE-2,5-DIAMINE	OECD 405 Result: Corrosive Species: Rabbit
2,4-DIAMINOPHENOXYETHANOL HCL	OECD 405 Result: Irritating Species: Rabbit
BASIC RED 51	OECD 405 Result: Irritating Species: Rat
HEXADIMETHRINE CHLORIDE	OECD 405 Result: Not Irritating
M-AMINOPHENOL	OECD 405 Result: Not Irritating Species: Rabbit
RESORCINOL	OECD 405, (2,5%) Result: Not Irritating Species: Rabbit

**Irritation Corrosion - Eye**

N,N-BIS(2-HYDROXYETHYL)-p-PHENYLENEDIAMINE SULFATE

OECD 438  
Result: Irritating  
Species: In vitro

4-AMINO-2-HYDROXYTOLUENE

OECD 492  
Result: Not Irritating  
Species: RhCE

AMMONIUM HYDROXIDE

Result: Corrosive

**Respiratory sensitization**

Due to partial or complete lack of data the classification is not possible.

**Skin sensitization**

May cause an allergic skin reaction.

**Skin sensitization**

BASIC RED 51

OECD 406  
Result: Not Sensitizing  
Species: Guinea pig

P-AMINOPHENOL

OECD 406  
Result: Sensitizing  
Species: Guinea pig

HEXADIMETHRINE CHLORIDE

OECD 429  
Result: Not Sensitizing  
Species: Mouse

2,4-DIAMINOPHENOXYETHANOL HCL

OECD 429  
Result: Sensitizing  
Species: Mouse

2-METHYLRESORCINOL

OECD 429  
Result: Sensitizing  
Species: Mouse

4-AMINO-2-HYDROXYTOLUENE

OECD 429  
Result: Sensitizing  
Species: Mouse

BASIC ORANGE 31

OECD 429  
Result: Sensitizing  
Species: Mouse

M-AMINOPHENOL

OECD 429  
Result: Sensitizing  
Species: Mouse

N,N-BIS(2-HYDROXYETHYL)-p-PHENYLENEDIAMINE SULFATE

OECD 429  
Result: Sensitizing  
Species: Mouse

RESORCINOL

OECD 429  
Result: Sensitizing  
Species: Mouse

TOLUENE-2,5-DIAMINE

OECD 429  
Result: Sensitizing  
Species: Mouse

AMMONIUM HYDROXIDE

Result: Not Sensitizing  
Species: Guinea pig**Germ cell mutagenicity**

Due to partial or complete lack of data the classification is not possible.

**Mutagenicity**

N,N-BIS(2-HYDROXYETHYL)-p-PHENYLENEDIAMINE SULFATE

Result: In vitro and in vivo tests did not show mutagenic effects.

AMMONIUM HYDROXIDE

Result: In vitro tests did not show mutagenic effects

HEXADIMETHRINE CHLORIDE

Result: In vitro tests did not show mutagenic effects

2,4-DIAMINOPHENOXYETHANOL HCL

Result: In vitro tests showed mutagenic effects which were not observed with in vivo test.

2-METHYLRESORCINOL

Result: In vitro tests showed mutagenic effects which were not observed with in vivo test.

BASIC ORANGE 31

Result: In vitro tests showed mutagenic effects which were not observed with in vivo test.

BASIC RED 51

Result: In vitro tests showed mutagenic effects which were not observed with in vivo test.

M-AMINOPHENOL

Result: In vitro tests showed mutagenic effects which were not observed with in vivo test.

RESORCINOL

Result: In vitro tests showed mutagenic effects which were not observed with in vivo test.

TOLUENE-2,5-DIAMINE

Result: In vitro tests showed mutagenic effects which were not observed with in vivo test.

4-AMINO-2-HYDROXYTOLUENE

Result: In vitro tests showed mutagenic effects which were not observed with in vivo tests.

P-AMINOPHENOL

Result: In vivo tests showed mutagenic effects

**Carcinogenicity** Not classifiable as to carcinogenicity to humans. Due to partial or complete lack of data the classification is not possible.

**Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)**

TOLUENE-2,5-DIAMINE (CAS 95-70-5)

**IARC Monographs. Overall Evaluation of Carcinogenicity**

RESORCINOL (CAS 108-46-3)

3 Not classifiable as to carcinogenicity to humans.

TOLUENE-2,5-DIAMINE (CAS 95-70-5)

3 Not classifiable as to carcinogenicity to humans.

**Slovenia. CMR. Protection of workers from exposure to carcinogen and mutagen agents (ULRS 101/2005, as amended)**

TOLUENE-2,5-DIAMINE (CAS 95-70-5)

Carcinogenic, Category 1B.

**Reproductive toxicity** Due to partial or complete lack of data the classification is not possible.

**Developmental effects**

N,N-BIS(2-HYDROXYETHYL)-p-PHENYLENEDIAMINE SULFATE

>= 50 mg/kg bw/d OECD 414

Result: NOAEL

Species: Rat

M-AMINOPHENOL

100 mg/kg bw/d OECD 414

Result: NOAEL

Species: Rat

P-AMINOPHENOL

100 mg/kg bw/d OECD 421

Result: NOAEL

Species: Rat

4-AMINO-2-HYDROXYTOLUENE

180 mg/kg bw/d OECD 414

Result: NOAEL

Species: Rat

BASIC RED 51

180 mg/kg bw/d OECD 414

Result: NOEL

Species: Rat

2,4-DIAMINOPHENOXYETHANOL HCL

20 mg/kg bw/d OECD 414

Result: NOAEL

Species: Rat

RESORCINOL

250 mg/kg bw/d OECD 414

Result: NOAEL

Species: Rat

2-METHYLRESORCINOL

400 mg/kg bw/d OECD 414

Result: NOAEL

Species: Rat

TOLUENE-2,5-DIAMINE

50 mg/kg bw/d OECD 414, Based on test data for structurally similar materials.

Result: NOAEL

Species: Rat

BASIC ORANGE 31

60 mg/kg bw/d

Result: NOAEL

Species: Rat

**Reproductivity**

TOLUENE-2,5-DIAMINE

>= 45 mg/kg bw/d OECD 416, Based on test data for structurally similar materials.

Result: NOAEL

Species: Rat

P-AMINOPHENOL

100 mg/kg bw/d OECD 421

Result: NOAEL

Species: Rat

N,N-BIS(2-HYDROXYETHYL)-p-PHENYLENEDIAMINE SULFATE

20 mg/kg bw/d OECD 408

Result: NOAEL

Species: Rat

Test Duration: 90 d

4-AMINO-2-HYDROXYTOLUENE

200 mg/kg bw/d OECD 415

Result: NOAEL

Species: Rat

RESORCINOL

245 mg/kg bw/d OECD 416

Result: NOAEL

Species: Rat

**Specific target organ toxicity - single exposure** Due to partial or complete lack of data the classification is not possible.

AMMONIUM HYDROXIDE

Result: Highly Irritating

**Specific target organ toxicity - repeated exposure** Due to partial or complete lack of data the classification is not possible.

BASIC RED 51

10 mg/kg bw/d OECD 408

Result: NOAEL

Species: Rat

Test Duration: 90 d

**Specific target organ toxicity - repeated exposure**

P-AMINOPHENOL	10 mg/kg bw/d OECD 408 Result: NOAEL Species: Rat Test Duration: 90 d
TOLUENE-2,5-DIAMINE	10 mg/kg bw/d OECD 408, Oral Result: NOEAL Species: Rat Test Duration: 90 d
2-METHYLRESORCINOL	100 mg/kg bw/d OECD 408 Result: NOAEL Species: Rat Test Duration: 90 d
4-AMINO-2-HYDROXYTOLUENE	180 mg/kg bw/d OECD 408, Oral Result: NOAEL Species: Rat Test Duration: 90 d
2,4-DIAMINOPHENOXYETHANOL HCL	20 mg/kg bw/d OECD 408 Result: NOAEL Species: Rat Test Duration: 90 d
M-AMINOPHENOL	20 mg/kg bw/d OECD 408 Result: NOAEL Species: Rat Test Duration: 90 d
N,N-BIS(2-HYDROXYETHYL)-p-PHENYLENEDIAMINE SULFATE	20 mg/kg bw/d OECD 408 Result: NOAEL Species: Rat Test Duration: 90 d
BASIC ORANGE 31	60 mg/kg bw/d OECD 408, Oral Result: NOAEL Species: Rat Test Duration: 90 d
RESORCINOL	80 mg/kg bw/d OECD 408, Oral Result: NOAEL Species: Rat Test Duration: 90 d 991 mg/m <sup>3</sup> Result: NOAEC Species: Rat Test Duration: 14 d

**Aspiration hazard** Due to partial or complete lack of data the classification is not possible.

**Mixture versus substance information** No information available.

**Other information** May cause allergic respiratory and skin reactions.

**SECTION 12: Ecological information**

**12.1. Toxicity** Toxic to aquatic life with long lasting effects. Based on available data, the classification criteria are not met for hazardous to the aquatic environment, acute hazard.

Components	Species		Test Results
2,4-DIAMINOPHENOXYETHANOL HCL (CAS 66422-95-5)			
<b>Aquatic</b>			
<i>Acute</i>			
Algae	EC50	Pseudokirchneriella subcapitata	36,5 mg/l, 72 h OECD 201
Crustacea	EC50	Daphnia magna	7,4 mg/l, 48 h OECD 202
2-METHYLRESORCINOL (CAS 608-25-3)			
<b>Aquatic</b>			
<i>Acute</i>			
Algae	EC50	Pseudokirchneriella subcapitata	71 mg/l, 72 h OECD 201
Crustacea	EC50	Daphnia magna	0,605 mg/l, 48 h OECD 202
Fish	LC50	Danio rerio	58,1 mg/l, 96 h
Other	EC50	Activated sludge of a predominantly domestic sewage	131 mg/l, 3 h OECD 209

Components	Species		Test Results
<b>4-AMINO-2-HYDROXYTOLUENE (CAS 2835-95-2)</b>			
<b>Aquatic</b>			
<i>Acute</i>			
Algae	EC50	Pseudokirchneriella subcapitata	41 mg/l, 72 h OECD 201
Crustacea	EC50	Daphnia magna	2,3 mg/l, 48 h OECD 202
Fish	LC50	Danio rerio	25 mg/l, 96 h OECD 236
Other	EC50	Activated sludge of a predominantly domestic sewage	> 150 mg/l, 3 h OECD 209
<i>Chronic</i>			
Crustacea	NOEC	Daphnia magna	0,24 mg/l, 21 d OECD 211
<b>AMMONIUM HYDROXIDE (CAS 1336-21-6)</b>			
<b>Aquatic</b>			
<i>Acute</i>			
Algae	EC50	Chlorella vulgaris	2700 mg/l, 18 d
Crustacea	EC50	Daphnia magna	101 mg/l, 48 h ASTM E729-80
Fish	LC50	Oncorhynchus mykiss	0,89 mg/l, 96 h
<i>Chronic</i>			
Crustacea	NOEC	Daphnia magna	0,79 mg/l, 21 d
Fish	NOEC	Oncorhynchus mykiss	1,2 mg/l, 61 d OECD 210
<b>BASIC ORANGE 31 (CAS 97404-02-9)</b>			
<b>Aquatic</b>			
<i>Acute</i>			
Algae	EC50	Desmodesmus subspicatus	8,5 mg/l, 72 h OECD 201
Fish	LC50	Danio rerio	> 100 mg/l, 96 h OECD 203
Other	EC50	Activated sludge of a predominantly domestic sewage	44,5 mg/l, 3 h OECD 209
<b>BASIC RED 51 (CAS 77061-58-6)</b>			
<b>Aquatic</b>			
<i>Acute</i>			
Crustacea	EC50	Daphnia magna	0,44 mg/l, 48 h
Fish	LC50	Lepomis macrochirus	10 - 100 mg/l, 48 h OECD 203
Other	EC50	Activated sludge of a predominantly domestic sewage	15 mg/l, 3 h
<b>HEXADIMETHRINE CHLORIDE (CAS 68393-49-7)</b>			
<b>Aquatic</b>			
<i>Acute</i>			
Algae	EC50	Algae	0,5 - 1 mg/l, 72 h
Crustacea	EC50	Daphnia magna	0,34 mg/l, 48 h
Fish	LC50	Danio rerio	0,21 - 0,46 mg/l, 96 h
<b>M-AMINOPHENOL (CAS 591-27-5)</b>			
<i>Acute</i>			
Other	IC50	Tetrahymena pyriformis	361 mg/l, 40 h
<b>Aquatic</b>			
<i>Acute</i>			
Algae	EC50	Pseudokirchneriella subcapitata	62 mg/l, 72 h OECD 201
Crustacea	EC50	Daphnia magna	1,1 mg/l, 48 h DIN 38412, Pt. 11
Fish	LC50	Danio rerio	82,64 mg/l, 96 h OECD 203
<i>Chronic</i>			
Crustacea	NOEC	Daphnia magna	0,05 mg/l, 21 d OECD 211
Fish	NOEC	Oryzias latipes	25 mg/l, 25 d OECD 204

Components	Species		Test Results
N,N-BIS(2-HYDROXYETHYL)-p-PHENYLENEDIAMINE SULFATE (CAS 54381-16-7)			
<b>Aquatic</b>			
<i>Acute</i>			
Algae	EC50	Pseudokirchneriella subcapitata	0,338 mg/l, 72 h OECD 201
Crustacea	EC50	Daphnia magna	0,381 mg/l, 48 h OECD 202
Fish	LC50	Danio rerio	> 235 mg/l, 96 h
Other	EC50	Activated sludge of a predominantly domestic sewage	228 mg/l, 3 h OECD 209
<i>Chronic</i>			
Crustacea	NOEC	Daphnia magna	0,674 mg/l, 21 d OECD 211
P-AMINOPHENOL (CAS 123-30-8)			
<b>Aquatic</b>			
<i>Acute</i>			
Algae	EC50	Pseudokirchneriella subcapitata	> 0,253 mg/l, 72 h OECD 201
Crustacea	EC50	Daphnia magna	0,182 mg/l, 48 h OECD 202
Fish	LC50	Oryzias latipes	0,82 mg/l, 96 h OECD 203
Other	EC50	Activated sludge of a predominantly domestic sewage	29,9 mg/l, 3 h OECD 209
RESORCINOL (CAS 108-46-3)			
<b>Aquatic</b>			
<i>Acute</i>			
Algae	EC50	Pseudokirchneriella subcapitata	> 97 mg/l, 97 h OECD 201
Crustacea	LC50	Daphnia magna	1 mg/l, 48 h OECD 202
Fish	LC50	Pimephales promelas	26,8 mg/l, 96 h EPA-660/3/75-009
Other		Activated sludge of a predominantly domestic sewage	79 mg/l, 3 h OECD 209
<i>Chronic</i>			
Crustacea	NOEC	Daphnia magna	>= 0,172 mg/l, 21 d
Fish	LOEC	Oncorhynchus mykiss	320 mg/l, 60 d
TOLUENE-2,5-DIAMINE (CAS 95-70-5)			
<b>Aquatic</b>			
<i>Acute</i>			
Algae	EC50	Pseudokirchneriella subcapitata	1,02 mg/l, 72 h OECD 201
Crustacea	EC50	Daphnia magna	0,491 mg/l, 48 h OECD 202
Fish	LC50	Oryzias latipes	0,05 mg/l, 96 h OECD 203
Other	EC50	Activated sludge of a predominantly domestic sewage	3,75 mg/l, 3 h OECD 209
<i>Chronic</i>			
Algae	NOEC	Pseudokirchneriella subcapitata	0,11 mg/l, 72 h OECD 201

\* Estimates for product may be based on additional component data not shown.

## 12.2. Persistence and degradability

### Biodegradability

#### Percent degradation (Aerobic biodegradation)

2-METHYLRESORCINOL	64 % OECD 301 B Result: Readily Biodegradable Test Duration: 28 d
4-AMINO-2-HYDROXYTOLUENE	0 % OECD 301 B Result: Not Readily Biodegradable Test Duration: 28 d
HEXADIMETHRINE CHLORIDE	Result: Not Readily Biodegradable
N,N-BIS(2-HYDROXYETHYL)-p-PHENYLENEDIAMINE SULFATE	14,3 % OECD 301B Result: Not Readily Biodegradable Test Duration: 28 d
RESORCINOL	66,7 % OECD 301 C Result: Readily Biodegradable Test Duration: 14 d

## Biodegradability

### Percent degradation (Aerobic biodegradation)

TOLUENE-2,5-DIAMINE

17 % OECD 301 D

Result: Not Readily Biodegradable

Test Duration: 28 d

## 12.3. Bioaccumulative potential

### Partition coefficient

#### n-octanol/water (log Kow)

4-AMINO-2-HYDROXYTOLUENE

-0,53 EU A,8

0,53 OECD 117

0,79

BASIC ORANGE 31

-2,13 OECD 107

BASIC RED 51

-1,97 OECD 107

M-AMINOPHENOL

0,21

N,N-BIS(2-HYDROXYETHYL)-p-PHENYLENEDIAMINE

-2,8

SULFATE

-2,8 OECD 107

P-AMINOPHENOL

0,04

0,25

RESORCINOL

0,8

TOLUENE-2,5-DIAMINE

0,25

-0,321 OECD 107

### Bioconcentration factor (BCF)

P-AMINOPHENOL

10 - 46 OECD 305 C

## 12.4. Mobility in soil

No data available.

## 12.5. Results of PBT

Not available.

## and vPvB assessment

## 12.6. Other adverse effects

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

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Residual waste

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

#### Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

#### EU waste code

The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

#### Disposal methods/information

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Special precautions

Dispose in accordance with all applicable regulations.

## SECTION 14: Transport information

### ADR

#### FINISHED GOODS

14.1. - 14.6.: Not regulated as dangerous goods.

#### BULK

14.1. - 14.6.: Not regulated as dangerous goods.

### IATA

#### FINISHED GOODS

14.1. - 14.6.: Not regulated as dangerous goods.

#### BULK

14.1. - 14.6.: Not regulated as dangerous goods.

### IMDG

#### FINISHED GOODS

14.1. - 14.6.: Not regulated as dangerous goods.

#### BULK

14.1. - 14.6.: Not regulated as dangerous goods.

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code** Not established.

## SECTION 15: Regulatory information

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

#### EU regulations

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended**

Not listed.

**Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**

Not listed.

#### Authorizations

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended**

Not listed.

#### Restrictions on use

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**

TOLUENE-2,5-DIAMINE (CAS 95-70-5)

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended**

Not listed.

#### Other EU regulations

**Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended**

AMMONIUM HYDROXIDE (CAS 1336-21-6)

M-AMINOPHENOL (CAS 591-27-5)

P-AMINOPHENOL (CAS 123-30-8)

RESORCINOL (CAS 108-46-3)

TOLUENE-2,5-DIAMINE (CAS 95-70-5)

#### Other regulations

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

#### National regulations

Follow national regulation for work with chemical agents. Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work, as amended.

### 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

## SECTION 16: Other information

#### List of abbreviations

Not available.

#### References

Not available.

#### Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

#### Full text of any H-statements not written out in full under Sections 2 to 15

H301 Toxic if swallowed.

H302 Harmful if swallowed.

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.  
H370 Causes damage to organs by ingestion.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.  
H411 Toxic to aquatic life with long lasting effects.  
H412 Harmful to aquatic life with long lasting effects.

None.

**Revision information**

**Training information**

**Disclaimer**

Follow training instructions when handling this material.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.