1 Commercial product name and supplier

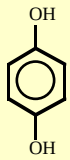
1.1	Commercial product name / designation	**RD-10 DEVELOPER FOR LASER PRINTER 2 X 15 l**
1.2	Application / use	Photographic B&W Developer
1.3	Producer	
1.4	Supplier	
1.5	TOX emergency number	
1.6	BAG T No. (CH)	
1.7	Product No.	951079

2 Composition

2.1 Chemical characterisation

Aqueous solution containing organic and inorganic salts.

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



2.2 Components

tribu L

CAS Nr. : 10117-38-1 EINECS: 233-321-1		um	
CAS Nr. : 7757-83-7 EINECS: 231-821-4	5 - 10 %	sodium sulfi	N/Ap
CAS Nr. : 123-31-9 EINECS: 204-617-8	5 - 10 %	1,4-dihydroxybenzene ; hydroquinone ; quinol	Xn: Harmful. N: Dangerous for the environment. R22: Harmful if swallowed. R40: Limited evidence of a carcinogenic effect. R41: Risk of serious damage to eyes. R43: May cause sensitisation by skin contact. R50: Very toxic to aquatic organisms. R68: Possible risk of irreversible effects.
CAS Nr. : EINECS:			
CAS Nr. : 111-46-6 EINECS: 203-872-2	1 - 5 %	2,2'-oxybisethanol diethylene glycol	Xn: Harmful. R22: Harmful if swallowed.

2.3 Further information

0,1 < KOH < 0,5 ww%

3	**Hazards identification**	Irritating to eyes. Limited evidence of a carcinogenic effect. May cause sensitisation by skin contact. Possible risk of irreversible effects.
4	**First aid measures**	
4.1	Eye contact	Irrigate with flowing water immediately and continuously for 15 minutes. Consult medical personnel.
4.2	Skin contact	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing.
4.3	Ingestion	Consult a physician.
4.4	Inhalation	Remove to fresh air. Consult a physician.
4.5	Further information	Overexposure may lead to allergic skin reactions with sensitized people. In this case, seek medical advice.
5	**Fire-fighting measures**	
5.1	Suitable extinguishing media	Water. Water fog, carbon dioxide, foam, dry chemicals.
5.2	Extinguishing media to avoid	None under normal conditions.
5.3	Further information	
6	**Accidental release measures**	Wear adequate personal protective equipment, see Section 8 (Exposure Controls/Personal Protection) Prevent from entering into soil, waterways and groundwater. Spills should be contained by, and covered with suitable absorbent material and removed for disposal. Dispose of according to local and national regulations.
7	**Handling and storage**	
7.1	Handling	Avoid eye and skin contact. Wash hands and exposed skin before eating, drinking or smoking and after work. Use only in well ventilated area.
7.2	Industrial hygiene	Avoid eye and skin contact. Wear suitable protective clothing, gloves and eye/face protection. Follow normal industrial hygiene standards. Do not consume or store food in the work area.
7.3	Storage	Keep containers tightly closed. Store in a well ventilated, cool, dry area.
7.4	Fire- and explosion protection	Not combustible.

8 Exposure controls / personal protection

8.1	Technical equipment	Good general ventilation should be sufficient for most processing operations. Vent work area to ensure airbone concentrations are below the current occupational exposure limits. 10 or more room air changes per hour containing a minimum of 15% fresh air, will meet these requirements.
8.2	Control of threshold limits	None established.
8.3	**Personal protective equipment**	
8.3.1	Respiratory protection	No respiratory protection needed under normal conditions. Good general ventilation should be sufficient.
8.3.2	Hand protection	Use chemical resistant gloves. In case of prolonged immersion or frequently repated 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 rubber.
8.3.3	Eye protection	Use chemical safety goggles. Eye wash fountain should be located in immediate work area.
8.3.4	Other	Appropriate protective clothing.

9 Physical and chemical properties

9.1	Appearance	liquid	
9.2	Color	colourless	
9.3	Odour	practically odourless	
9.4	Change in physical state Melting point	~ 0	°C
	Boiling point	~ 100	°C
9.5	Density	1.257	g/cm3 (20 °C)
9.6	Vapour pressure	-----	mm Hg (21 ^{0}C)
9.7	Viscosity	-----	cP
9.8	Solubility in water	-----	g/l (20 °C)
		completely soluble	
9.9	pH-value		(25 °C)
		alkaline	
9.10	Flash point	-----	°C
9.11	Ignition temperature	-----	°C
9.12	Explosion limits	Lower: -----	vol.%
		Upper: -----	vol.%
	remark(s)	None.	
9.13	Further information	None.	

10 Stability and reactivity

10.1	Thermal decomposition	Is stable under normal storage conditions.

10.2	Hazardous decomposition products	In case of thermal decomposition poisonous and irritant gases/fumes can be released. Hazardous Decomposition Products: CO_2, SO_2
10.3	Hazardous reactions	With strong acids. With strong oxidisers.
10.4	Further information	Keep away from flammable materials, including chemicals.

11 Toxicological information

Product Information:

	LD50, oral:	> 2000	mg/kg	Test Animal: Rats
	LD50, dermal:	N/Av		Test Animal: N/Av

11.1 Acute Overexposure:

Primary Skin Irritation Index:	N/Av	N/Av
Primary Eye Irritation Index:	N/Av	N/Av

11.2 Further information

Li … carcinogenic effect. May cause
ki … risk of irreversible effects.

Ingredients information

CAS No.	Component	LD50 (mg/kg)	Test Animal:
10117-38-1	potassium sulfite	N/Av	
7757-83-7	sodium sulfite	820	Mice
123-31-9	1,4-dihydroxybenzene ; hydroquinone ; quinol	320	Rats
20786-60-1	potassium borate	N/Av	
	2,2'-oxybisethanol diethylene glycol	12565	Rats

Further information: None.

12 Ecological information

Ecotox Data: N/Av

Chemical Fate Data:

Ingredients information

CAS No.	Component	Fish Toxicity		Fish Organism
10117-38-1	potassium sulfite	LC50	130 mg/L	Not identified
	sodium sulfite	LC50	N/Av	
	1,4-dihydroxybenzene ; hydroquinone ; quinol	LC50	0.15 - 0.16 mg/L	Golden orfe
	potassium borate			
	2,2'-oxybisethanol diethylene glycol			

13 Disposal considerations

Dispose of according to local and national regulations.

Containers must be disposed of in accordance with local regulations.

13.1 EC-Waste Code: 090101

13.2 Origin: Photographic Industry

14 Transport information

14.1 Road transport

UN-Number	-----		
Name and description (PSN)			
GGVSE class		Classification code	-----
RID / ADR class		Classification code	-----
Packing group		Labels	-----
Special provisions	-----	Limited quantities	-----
Packing instructions		Special pack. prov.	-----
		Mixed pack. prov.	
Tremcard			
Further information		nd (road,	

14.2 Marine transport

UN-Number	-----		
Proper Shipping Name (PSN)			
Class or division	GGVSee: -----		ADNR: -----
Subsidiary risk(s)		Packing group	-----
Special provisions		Limited quantities	-----
Packing instructions		Packing provisions	-----
IBC instructions		IBC provisions	-----
EmS		MFAG	-----
Marine pollutant	-----		
Further information		a.	

14.3 Air transport

ICAO / IATA-GDR	----
UN-No.	-----
PSN	-----
Subsidiary risk	-----
Labels	-----
Packing group	
Passenger aircraft	
Cargo aircraft only	
Further information	Material not classified for air transport.

15	**Regulatory information**	This product requires classification according to the criteria of the EC.
15.1	UN-No.	
15.2	Swiss toxicity class	4
15.3	EC-No.	-----
15.4	Hazard symbols	**Xn** 
15.5	Hazard designation	Xn: Harmful. Contains hydroquinone.
15.6	Risk phrases	**R: 36-40-43-68**
		Irritating to eyes.
		Limited evidence of a carcinogenic effect.
		68 Possible risk of irreversible effects.
15.7	Safety phrases	**S: 26-36/37/39**
		In case of contact with eyes, rinse immediately with plenty of water and seek medical advise.
		Wear suitable protective clothing, gloves and eye/face protection.
15.8	TLV / MAK/...	SO2: MAK 0.5 ppm, 1.3 mg/m3, TLV 2 ppm
15.9	BVD classification	-----
15.10	VbF	-----
15.11	Further information	None.

16	**Other information**	The use of the preparation is restricted to professional users!
16.1	Safety Data Sheet new / changed in section:	15.8 (TLV/MAK): Values updated
16. 2	R-phrases mentioned in point 2.2 (components):	see section 2 of the Safety Data Sheet

The above mentioned data correspond to our present state of knowledge and experience. The safety data sheet serves as description of the products in regard to necessary safety measures. The indications have not the meaning of guarantees on properties.

N/Av = Not available N/Ap = Not applicable