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

1.1 Identification of the substance or mixture:

Product name	:	POLYMER DELETION PEN
Additional identification	:	Polymer Deletion Pen (broad tip), POLYMER DELETION PEN (MED TIP)
REACH Registration No	:	Registration numbers of the individual components: see section 3.2, if applicable.

1.2 Use of the substance/mixture:

Identified relevant uses	:	Correction pen
Uses advised against	:	Do not use for products which come into direct contact with food stuffs. Only for professional use. Do not use for products which come into direct contact with the skin. Do not use for private purposes (household).

1.3 Company/undertaking identification

Agfa-Gevaert Ltd.
Vantage West
Great West Road
Brentford, Middlesex TW8 9AX
United Kingdom
Tel. : +44 (0)20 8 231 4616
Fax : +44 (0)20 8 231 4951
E-mail: electronic.sds@agfa.com

1.4 Emergency telephone

Emergency telephone number (Belgium) : +32 3 4443333 (24h/24h)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

Regulation(EC) No 1272/2008 (CLP)	
• Hazard classes	Acute toxicity Oral
Hazard categories	Category 3
Hazard statements	H301
Classification procedure	According the classification criteria of CLP Regulation (EC) No 1272/2008.
• Hazard classes	Acute toxicity Dermal
Hazard categories	Category 2
Hazard statements	H310
Classification procedure	According the classification criteria of CLP Regulation (EC) No 1272/2008.
• Hazard classes	Acute toxicity Inhalation
Hazard categories	Category 3
Hazard statements	H331
Classification procedure	According the classification criteria of CLP Regulation (EC) No 1272/2008.
• Hazard classes	Skin corrosion
Hazard categories	Category 1A

Hazard statements	H314
Classification procedure	According the classification criteria of CLP Regulation (EC) No 1272/2008.
• Hazard classes	Serious eye damage
Hazard categories	Category 1
Hazard statements	H318
Classification procedure	According the classification criteria of CLP Regulation (EC) No 1272/2008.
• Hazard classes	Specific target organ toxicity - single exposure Inhalation
Hazard categories	Category 3
Hazard statements	H336
Target organs	Central nervous system
Classification procedure	According the classification criteria of CLP Regulation (EC) No 1272/2008.
• Hazard classes	Flammable liquids
Hazard categories	Category 4
Hazard statements	H227
Classification procedure	
• Hazard classes	Acute toxicity Dermal
Hazard categories	Category 1
Hazard statements	H310
Classification procedure	

67/548/EEC or 1999/45/EC	
Hazards characteristics	Toxic, Corrosive
R-phrase(s)	R23/24/25, R34, R36

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

2.2 Label elements:

Hazardous components which must be listed on the label :

• CAS-No.	:	64-18-6	Formic acid
		96-48-0	gamma-Butyrolactone
		7664-39-3	Hydrofluoric acid
		68412-54-4	Nonylphenol-polyethyleneglycol ether

Symbol(s)

GHS06

GHS05

Signal word	:	DANGER	
Hazard statements	:	H301	Toxic if swallowed.
		H310	Fatal in contact with skin.
		H314	Causes severe skin burns and eye damage.
		H318	Causes serious eye damage.
		H331	Toxic if inhaled.
		H336	May cause drowsiness or dizziness.
Precautionary statements:	:	P280	Wear protective gloves/protective clothing/eye protection/face protection.

prevention			
		P260	Do not breathe dust/fume/gas/mist/vapours/spray.
		P262	Do not get in eyes, on skin, or on clothing.
Precautionary statements: response	:	P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/…
		P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
		P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing.
		P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
Precautionary statements: storage	:	P403+P233	Store in a well-ventilated place. Keep container tightly closed.

2.3 Other hazards:

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixture related information:

This correction pen mainly consists of a plastic housing enclosing a porous wick, which retains a very small quantity of corrector liquid. When not in use, the pen is closed with a protective cap. Labelling and hazard information in this Safety Data Sheet refers to the pure corrector liquid as retained in the wick.

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 in the meaning of regulation(EC) No 1272/2008 (CLP)

- Formic acid — Concentration [%] : 40.0 - 55.0

CAS-No.	:	64-18-6
Index-No.	:	607-001-00-0
EINECS-No.	:	200-579-1
REACH Registration No	:	01-2119491174-37-XXXX
Hazard classes	:	Skin corrosion, Serious eye damage
Hazard categories	:	Category 1A, Category 1
Hazard statements	:	H314, H318

- gamma-Butyrolactone — Concentration [%] : 20.0 - 30.0

CAS-No.	:	96-48-0
EINECS-No.	:	202-509-5
REACH Registration No	:	02-2119471839-21-0002
Hazard classes	:	Acute toxicity Oral, Serious eye damage, Specific target organ toxicity - single exposure
Hazard categories	:	Category 4, Category 1, Category 3
Hazard statements	:	H302, H318, H336

- Hydrofluoric acid — Concentration [%] : 1.0 - 2.5

CAS-No. : 7664-39-3
Index-No. : 009-002-00-6
EINECS-No. : 231-634-8
REACH Registration No : 01-2119458860-33-XXXX
Hazard classes : Acute toxicity, Acute toxicity, Acute toxicity, Skin corrosion
Hazard categories : Category 2, Category 1, Category 2, Category 1A
Hazard statements : H300, H310, H330, H314

- Nonylphenol-polyethyleneglycol ether Concentration [%] : 0.5 - 0.9

CAS-No. : 68412-54-4
REACH Registration No : 01-2119485218-31-XXXX
Hazard classes : Acute toxicity Oral, Skin irritation, Serious eye irritation, Chronic hazards to the aquatic environment
Hazard categories : Category 4, Category 2, Category 2, Category 2
Hazard statements : H302, H315, H319, H411

Hazardous components in the meaning of 67/548/EEC or 1999/45/EC

- Formic acid Concentration [%] : 40.0 - 55.0

CAS-No. : 64-18-6
Index-No. : 607-001-00-0
EINECS-No. : 200-579-1
Symbol(s) : C
R-phrase(s) : R35

- gamma-Butyrolactone Concentration [%] : 20.0 - 30.0

CAS-No. : 96-48-0
EINECS-No. : 202-509-5
Symbol(s) : Xn
R-phrase(s) : R22, R41, R67

- Hydrofluoric acid Concentration [%] : 1.0 - 2.5

CAS-No. : 7664-39-3
Index-No. : 009-002-00-6
EINECS-No. : 231-634-8
Symbol(s) : T+, C
R-phrase(s) : R26/27/28, R35

- Nonylphenol-polyethyleneglycol ether Concentration [%] : 0.5 - 0.9

CAS-No. : 68412-54-4
Symbol(s) : N
R-phrase(s) : R50/53

Components with a community workplace exposure limit

- Formic acid
- gamma-Butyrolactone
- Hydrofluoric acid

M-factor

- Nonylphenol-polyethyleneglycol ether
  Acute hazards to the aquatic environment : 1
  Chronic hazards to the aquatic environment : 10

3.3 Remark:

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

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. Apply calcium gluconate gel on and around the affected area and continuous massage it into the skin until at least 15 minutes after pain is relieved. Cover the area with a dressing soaked in the gel and lightly bandage. Seek medical attention. Call a physician immediately.
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:

Symptoms	:	Inhalation may cause nausea or dizziness. If inhaled: sore throat, cough, shortness of breath. Upon contact with skin: redness, pain. In case of eye contact: redness and pain.

4.3 Indication of immediate medical attention and special treatment needed:

General advice	:	Call a physician immediately.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media	:	e.g. water, CO2, foam, powder, sand.
Extinguishing media which must not be used for safety reasons	:	Not applicable.

5.2 Special hazards arising from the substance or mixture:

Specific hazards during fire fighting	:	Combustion of one pencil will not cause a major problem to health, safety and to the environment. When burning large amounts of pencils, hazardous fumes can be set free. Their composition is depending on the conditions of the combustion process and will not substantially differ from that resulting from merely burning plastic housings and caps of such pencils.
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.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Personal precautions	:	Cleanup personnel must use appropriate personal protective equipment.

Additional advice	:	Wash away residues with plenty of water.

6.2 Environmental precautions:

Environmental precautions	:	Prevent product from entering drains.

6.3 Methods and material for containment and cleaning up:

Methods for cleaning up	:	Dilute with plenty of water.

6.4 Reference to other sections:

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

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Advice on safe handling	:	In normal conditions of storage, transport and use, the liquid will not leak from the pencil.
Hygiene measures	:	Observe normal precautions when handling chemicals.Avoid inhaling vapour.Don't wear the correction pen on your body. Avoid that the tip of the wick comes into contact with the eyes and the skin. Always apply the protective cap to the pen, when the latter is not in use. Unproper handling, such as licking the wick, inhaling the corrector liquid or breaking and opening the pen, so as to set free the wick, is to be avoided.Keep away from foodstuffs, drinks and tobacco.
Advice on protection against fire and explosion	:	Keep away from heat and sources of ignition.

7.2 Conditions for safe storage:

Requirements for storage areas and containers	:	Keep away from heat and sources of ignition.
Further information on storage conditions	:	Store in a dry area.

7.3 Specific end use:

This substance is used only by trained professionals under restricted conditions.

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

- Formic acid CAS-No.: 64-18-6

Basis	Revision Date	Value	Type

EU ELV	12 2009	9 mg/m3 5 ppm	TWA
EH40 WEL	2005	9.6 mg/m3 5 ppm	TWA

- Hydrofluoric acid CAS-No.: 7664-39-3

Basis	Revision Date	Value	Type
EU ELV	12 2009	1.5 mg/m3 1.8 ppm	TWA
EU ELV	12 2009	2.5 mg/m3 3 ppm	STEL
EH40 WEL	2005	1.5 mg/m3 1.8 ppm	TWA
EH40 WEL	2005	2.5 mg/m3 3 ppm	STEL

Biological limit values

- gamma-Butyrolactone CAS-No.: 96-48-0

Basis	Value	Investigation parameter	Sampling time	Biological specimen
		We are not aware of any national exposure limit.		

8.1.1.2 Additional exposure limits under the conditions of use:

No other exposure limits applicable.

8.1.1.3 DNEL/DMEL and PNEC-values:

DNEL

No Chemical Safety Report performed. No DNEL/DMEL value determined.

PNEC

No Chemical Safety Report performed. No PNEC value determined.

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:**

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 goggles. EN 166.
Body Protection	:	Safety clothes : long sleeved clothing EN13688

Environmental exposure controls:

Effluent regulations/discharge/treatment/contents may vary from one area to another. Please consult the local regulations regarding the disposal of this material. Do not release into drain. Collect for removal by a licensed waste contractor.

EU Directive	Status
European Directive 2000/60/EC (water)	not on list
European Directive 1996/62/EC (air)	not on list

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Basic physical and chemical properties:

9.1.1 Appearance:

State of matter	:	Liquid
Form	:	Liquid.
Color	:	Colourless.
Odor	:	Pungent smell
Odor threshold	:	No data available

9.1.2 Important health, safety and environmental information:

pH	:	Not applicable	
Melting point/range	:	< 0 °C	Method: Literature.
Boiling point/range	:	> 100 °C	Method: Literature.
Flash point	:	> 62 °C	Method: Literature.
Autoignition temperature	:	No data available	
Vapour pressure	:	Not applicable	
Relative vapour density	:	Not applicable	
Relative density (20 °C)	:	1.100	Method: Literature.
Solubility/qualitative	:	Miscible with water at all ratios.	
Water solubility	:	No data available	
Partition coefficient (n-octanol/water)	:	Not applicable	
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	

9.2 Other information:

VOC content	:	Not applicable

10. STABILITY AND REACTIVITY

10.1 Reactivity:

Reactivity	:	Reactivity is not to be expected under normal conditions of temperature and pressure.

10.2 Chemical stability:

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

10.3 Possibility of hazardous reactions:

Hazardous reactions	:	The product is stable under normal conditions of storage and use.

10.4 Conditions to avoid:

Conditions to avoid	:	Not applicable

10.5 Materials to avoid:

Materials to avoid	:	Not applicable

10.6 Hazardous decomposition products:

Hazardous decomposition products	:	Toxic and irritating gases/fumes may be given off during burning or thermal decomposition.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Toxicokinetics, metabolism and distribution:

No data available

Acute effects (toxicity tests):

➢ **Acute Toxicity**

- Formic acid

	Effect dose	Species	Value	Method
Acute oral toxicity	LD50	rat	730 mg/kg	Literature.
Acute dermal toxicity	No data available			
Acute inhalation toxicity	LC50	rat	7.4 mg/l/ 4 h	Literature.

- gamma-Butyrolactone

	Effect dose	Species	Value	Method
Acute oral toxicity	LD50	rat	1,540 mg/kg	Literature.
Acute dermal toxicity	LD50	guinea pig	> 5,000 mg/kg	Literature.
	Based on available data, the classification criteria are not met.			
Acute inhalation toxicity	LC50	rat	> 5.1 mg/l/ 4 h	Literature.
	Based on available data, the classification criteria are not met.			

- Hydrofluoric acid

	Effect dose	Species	Value	Method
Acute oral toxicity				

Acute dermal toxicity	No data available			
Acute inhalation toxicity	No data available LC50 Very toxic by inhalation.	rat		Literature.

- Nonylphenol-polyethyleneglycol ether

	Effect dose	Species	Value	Method
Acute oral toxicity	LD50	rat	2,000 mg/kg	Literature.
Acute dermal toxicity	No data available			
Acute inhalation toxicity	No data available			

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

- Formic acid

Specific effects	Affected organs
No data available	

- gamma-Butyrolactone

Specific effects	Affected organs
No data available	

- Hydrofluoric acid

Specific effects	Affected organs
	Respiratory system
Exposure to the substance can cause chemical burns. The substance works corrosive on the eyes, the skin and the respiratory tract. If swallowed, corrosive. Inhalation may cause lung inflammation and/or pulmonary edema, only after symptoms of corrosive effects on the mucous membranes of eyes and/or upper respiratory tract. In severe cases chance of fatality. Poisoning symptoms include abdominal pain, diarrhea, vomiting, coma, convulsions and excessive salivation.	

- Nonylphenol-polyethyleneglycol ether

Specific effects	Affected organs
No data available	

➢ **Irritant and corrosive effects:**

- Formic acid

	Exposure time	Species	Evaluation	Method
Primary irritation to the skin			Corrosive	Literature.
	Acute dermal irritation/corrosion			
Irritation to eyes			Corrosive	Literature.
	Acute eye irritation/corrosion			

- gamma-Butyrolactone

	Exposure	Species	Evaluation	Method

	time		
Primary irritation to the skin Irritation to eyes		No skin irritation Severe eye irritation.	Literature. OECD Test Guideline 405

- Hydrofluoric acid

	Exposure time	Species	Evaluation	Method
Primary irritation to the skin		rabbit	Causes severe burns.	OECD Test Guideline 404
	Extremely corrosive and destructive to tissue.			
Irritation to eyes		rabbit	Moderate eye irritation	OECD Test Guideline 405
	Moderate eye irritation			

- Nonylphenol-polyethyleneglycol ether

	Exposure time	Species	Evaluation	Method
Primary irritation to the skin Irritation to eyes	No data available			
	No data available			

➢ **Irritation to the respiratory tract:**

- Formic acid

May cause irritation of respiratory tract.

- gamma-Butyrolactone

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

- Hydrofluoric acid

irritation, headache, biting, sore throat and cough, difficulty breathing, shortness of breath.

- Nonylphenol-polyethyleneglycol ether

No data available

➢ **Sensitisation:**

- Formic acid

Species	Evaluation	Method
guinea pig	Non-sensitizer	OECD Test Guideline 406

- gamma-Butyrolactone

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

- Hydrofluoric acid

Species	Evaluation	Method
	May cause sensitization by inhalation and skin contact.	Literature.

- Nonylphenol-polyethyleneglycol ether

Species	Evaluation	Method

	No data available

➢ **Aspiration hazard:**

No data available

Sub-acute, sub-chronic and chronic toxicity

➢ **Repeated dose toxicity:**

No data available

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

No information available.

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

- **Carcinogenicity**

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

- **Mutagenicity**

- Formic acid

Based on available data, the classification criteria are not met.The results of the mutagenicity tests (Ames and chromosome aberration test - metabolic activitated and non-activated groups)showed that DNA reactive metabolites (formed during hepatoic biotransformation) are not to be expected.

- gamma-Butyrolactone

There is no evidence for mutagenicity from studies in animals.Based on available data, the classification criteria are not met.

- Hydrofluoric acid

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

- Nonylphenol-polyethyleneglycol ether

No data available

- **Genetic toxicity in vitro**

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

- **Genetic toxicity in vivo**

No data available

- **Teratogenicity**

No data available

- **Toxicity to reproduction**

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

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

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

Teratogenicity : No data available
Toxicity to reproduction : Based on available data, the classification criteria are not met.

Experiences made in practice:

There is no data available for this product.

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity:

- Formic acid

	Effect dose	Exposure time	Species	Value
Toxicity to fish	LC50	96 h	Leuciscus idus (golden orfe)	> 46 mg/l
Toxicity to daphnia	EC50	48 h	Daphnia magna (water flea)	34.2 mg/l
Toxicity to algae	EC50	72 h	Scenedesmus subspicatus (algae)	26.9 mg/l
Toxicity to bacteria	EC50	17 h	Pseudomonas putida (bacteria)	46.7 mg/l

- gamma-Butyrolactone

	Effect dose	Exposure time	Species	Value
Toxicity to fish	LC50	96 h	Leuciscus idus (golden orfe)	> 220 mg/l
	Method: DIN 38412			
	Based on available data, the classification criteria are not met.			
Toxicity to daphnia	EC50	48 h	Daphnia magna	> 500 mg/l
	Method: Literature.			
	Based on available data, the classification criteria are not met.			
Toxicity to algae	EC50	72 h	Scenedesmus subspicatus (algae)	360 mg/l
	Method: Literature.			
Toxicity to bacteria	EC50	17 h	Pseudomonas putida (bacteria)	> 10,000 mg/l
	Method: OECD-Guideline No.209; 88/302/EEC C.11			

- Hydrofluoric acid

	Effect dose	Exposure time	Species	Value
Toxicity to fish	LC50	96 h	Oncorhynchus mykiss (rainbow trout)	51 mg/l
	Method: Literature.			
	Based on available data, the classification criteria are not met.			
Toxicity to fish	LC50	96 h	Oncorhynchus mykiss (rainbow trout)	108 mg/l
	Method: Literature.			
	Based on available data, the classification criteria are not met.			
Toxicity to daphnia	EC50	96 h		26 mg/l
	Method: Literature.			
	Based on available data, the classification criteria are not met.			
Toxicity to algae	EC50	96 h	scenedesmus subspicatus	43 mg/l
	Method: Literature.			
	Based on available data, the classification criteria are not met.			

Toxicity to algae	EC50	96 h	Selenastrum capricornutum (algae)	122 mg/l
	Method: Literature. Based on available data, the classification criteria are not met.			
Toxicity to algae	NOEC	96 h	Scenedesmus quadricauda (algae)	50 mg/l
	Method: Literature. Based on available data, the classification criteria are not met.			
Toxicity to bacteria	NOEC	3 h	Bacteria	510 mg/l
	Method: OECD-Guideline No.209; 88/302/EEC C.11 Based on available data, the classification criteria are not met.			

- Nonylphenol-polyethyleneglycol ether

	Effect dose	Exposure time	Species	Value
Toxicity to fish	LC50	96 h	Pisces (fish)	10 mg/l
	Method: Literature.			
Toxicity to daphnia	EC50	48 h	Daphnia magna	> 10 mg/l
	Method: Literature.			
Toxicity to algae	No data available			
Toxicity to bacteria	No data available			

12.2 Persistence and degradability:

Physico-chemical removability

The product can be degraded by abiotic (e.g. chemical or photolytic) processes.

Chemical Oxygen Demand (COD)

No data available

Adsorbed organic bound halogens (AOX)

Product does not contain any organic halogens.

Biodegradation

No data available

Biochemical Oxygen Demand (BOD)

No data available

12.3 Bioaccumulative potential:

Partition coefficient (n-octanol/water)

Not applicable

Bioconcentration factor (BCF)

Bioaccumulation is unlikely.

12.4 Mobility in soil:

- Formic acid

Groundwater contamination is possible.Soluble in water.

- gamma-Butyrolactone

This product will show high soil mobility and will be degraded from the ambient atmosphere by the reaction with photochemically produced hydroxyl radicals with an estimated half-life of 17.8 days.

- Hydrofluoric acid

Soluble in water.not applicable

- Nonylphenol-polyethyleneglycol ether

No information available.

Henry's constant

- Formic acid

Value	Temperature	Method
0.000019 hPa	25 °C	Literature.

- gamma-Butyrolactone

Value	Temperature	Method
>= 0.000005 hPa		Literature.

- Hydrofluoric acid

Value	Temperature	Method
		No information available.

- Nonylphenol-polyethyleneglycol ether

Value	Temperature	Method
		No information available.

Transport between environmental compartments

Transport between environmental compartments can be expected.

12.5 Results of PBT and vPvB assessment:

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:

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.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Waste disposal methods

Used correction pencils are considered industrial waste. Refer to local provisions and regulations on disposal of such waste.

Empty containers.

Uncontrolled disposal or recycling of this packaging is not permitted and can be dangerous.Collect packaging separately.Label precautions also apply to this container when empty.

14. TRANSPORT INFORMATION

Not regulated according to ADR.
Not regulated according to ADNR.
Not regulated according to RID.
Not regulated according to IMO/IMDG.
Not regulated according to ICAO/IATA aircraft only.
Not regulated according to ICAO/IATA passenger and cargo aircraft.

15. REGULATORY INFORMATION

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

Authorisation and/or restriction on use

Authorisation	:	No
Restriction on use	:	Not listed on EU. REACH, Annex XVII, Restrictions on manufacture, placing on the market and use of certain dangerous substances, mixtures & articles (Reg 1907/2006/EC, as amended

Other EU regulations

Does not fall under specific EU-Regulations.

15.2 Chemical Safety Assessment

No Chemical Safety Report needed according REACH.

16. OTHER INFORMATION

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

H227	Combustible Liquid
H300	Fatal if swallowed.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

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

R22	Harmful if swallowed.
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
R26/27/28	Very toxic by inhalation, in contact with skin and if swallowed.
R34	Causes burns.
R35	Causes severe burns.
R36	Irritating to eyes.
R41	Risk of serious damage to eyes.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R67	Vapours may cause drowsiness and dizziness.

Further information

This Safety Data Sheet is compiled in accordance with European Directives and corresponding national legislation.

This product is not manufactured by Agfa. The information disclosed in this Safety Data Sheet has been provided by the manufacturer.

The information disclosed in this Safety Data Sheet is believed to be correct to the best of our current knowledge and experience. It only relates to the specific product designated herein and it may not be valid when said product is used in combination with any other material or in any process, unless specified in the text. This document aims to provide the necessary health and safety information of the product and is not to be considered a warranty or quality specification. It is the responsibility of the user to comply with local legislation relating to safety, health, environment and waste management.

Sources of key data used to compile the datasheet

Handbuch der gefährlichen Güter, Hommel.
The Dictionary of Substances and their Effects, Royal Society of Chemistry.
Gefährliche Chemische Reaktionen, L.Roth und U.Weller.
Handbuch der Umweltgifte, Dauderer.
Chemiekaarten, latest version.
Safety Data Sheet from the supplier.
IUCLID Test data.

Abbreviations

ADR:	Accord européen relatif au transport international des marchandises Dangereuses par Route
ADNR:	Accord européen relatif au transport international des marchandises Dangereuses par la Rhin
AGW:	Arbeitsplatzgrenswerte (GE)
ATEmix:	Acute toxicity estimate of the mixture
CLP:	Classification, Labelling and Packaging of substances and mixtures
CMR:	Carcinoge
DNEL:	Derived No Effect Level
EC0:	Effective Concentration 0%
EC5:	Effective Concentration 5%
EC10:	Effective Concentration 10%
EC50:	Median Effective Concentration
EC100:	Effective Concentration 100%
EH40 WEL:	Workplace Exposure Limit (UK)
IATA:	International Air Transport Association
ICAO:	International Civil Aviation Organization

IC50:	inhibitory concentration 50%
IMDG:	International Maritime Dangerous Goods
IMO:	International Maritime Organization
IUCLID:	International Uniform ChemicaL Information Database
LC50:	Lethal Concentration 50%
LC100:	Lethal Concentration 100%
LOAEL:	Lowest Observed Adverse Effect Level
LDL0	Lethal Dose (minimum found to be lethal)
LD50:	Lethal Dose 50%
MAC:	Maximaal Aanvaardbare Concentratie (NL)
MAK:	Maximale Arbeitsplatz-Konzentration
NOAEL:	No Observed Adverse Effect Level
NOEL:	No Observed Effect Level
NOEC:	No Observed Effect Concentration
OEL:	Occupatianal Exposure Limit
PBT:	Persistent, Bioaccumulative and Toxic substance
PNEC:	Predicted No Effect Concentration
REACH:	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID:	Regulations concerning the International Transport of Dangerous Goods by Rail
STEL:	Short Term Exposure Limit
TLV:	Treshold Limit Value
TRGS900:	Arbeitsplatzgrenswerte (GE)
TWA:	Time Weighted Average
VOC:	Volatile Organic Compound
vPvB:	very Persistent and very Bioaccumulative substance