

Trade name: BT10441, ink, black

Current version : 1.0.0, issued: 16.06.2021

Replaced version: -, issued: -

Region: IE

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

1.1 Product identifier

Trade name

BT10441, ink, black

UFI:

A385-003R-T00A-WHYP

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

Relevant identified uses of the substance or mixture

printer's ink

Ink

Uses advised against

No data available.

1.3 Details of the supplier of the safety data sheet

Address

Paul Leibinger GmbH & Co. KG

Daimlerstrasse 14

78532 Tuttlingen

Telephone no. +49 (0)7461 9286 0

Fax no. +49 (0)7461 9286 119

e-mail info@leibinger-group.com

Advice on Safety Data Sheet

sdb_info@umco.de

1.4 Emergency telephone number

+353 1 809 2166 (National Poisons Information Centre)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)

Eye Irrit. 2; H319

Flam. Liq. 2; H225

Repr. 1B; H360D

Skin Sens. 1; H317

STOT SE 3; H336

Classification information

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)

Hazard pictograms



GHS02



GHS07



GHS08

Signal word

Danger

Trade name: BT10441, ink, black

Current version : 1.0.0, issued: 16.06.2021

Replaced version: -, issued: -

Region: IE

Hazardous component(s) to be indicated on label:

butanone

Reaction mass of Amines, C10-14-branched and linear alkyl, [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)] [1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-)

Reaction mass of Chromate(1-), [N-[7-hydroxy-8-[(2-hydroxy-5-nitrophenyl)azo]-1-naphthalenyl]acetamidato(2-)] [1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-, hydrogen, compd. with N-cyclohexylcyclohexanamine (1:1) and hydrogen bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-), compound with dicyclohexylamine (1:1) and hydrogen bis[N-[7-hydroxy-8-[(2-hydroxy-5-nitrophenyl)azo]-1-naphthyl]acetamidato(2-)]chromate(1-), compound with dicyclohexylamine (1:1)

Hazard statement(s)

H225 Highly flammable liquid and vapour.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H360D May damage the unborn child.

Hazard statements (EU)

EUH066 Repeated exposure may cause skin dryness or cracking.

Precautionary statement(s)

P201 Obtain special instructions before use.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting/ equipment.
P242 Use non-sparking tools.
P243 Take action to prevent static discharges.
P261 Avoid breathing mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P370+P378 In case of fire: Use sand, fire powder, carbon dioxide or foam to extinguish.

UFI:

A385-003R-T00A-WHYP

Supplemental label elements

"Restricted to professional users"

2.3 Other hazards

PBT assessment
No data available.
vPvB assessment
No data available.

SECTION 3: Composition/information on ingredients**3.1 Substances**

Not applicable. The product is not a substance.

3.2 Mixtures**Chemical characterization**

Mixture based on: Resins; Cellulose nitrate; dyes

Hazardous ingredients

No	Substance name	Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration %
1	butanone		

Trade name: BT10441, ink, black

Current version : 1.0.0, issued: 16.06.2021

Replaced version: -, issued: -

Region: IE

	78-93-3 201-159-0 606-002-00-3 01-2119457290-43	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 EUH066	>= 70,00 - < 90,00	wt%
2	Reaction mass of Amines, C10-14-branched and linear alkyl, [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)] [1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-)			
	- 939-191-9 - 01-2120764854-42	Skin Sens. 1B; H317 Repr. 1B; H360D STOT RE 2; H373	>= 5,00 - < 10,00	wt%
3	Reaction mass of Chromate(1-), [N-[7-hydroxy-8-[(2-hydroxy-5-nitrophenyl)azo]-1-naphthalenyl]acetamidato(2-)] [1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-, hydrogen, compd. with N-cyclohexylcyclohexanamine (1:1) and hydrogen bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) , compound with dicyclohexylamine (1:1) and hydrogen bis[N-[7-hydroxy-8-[(2-hydroxy-5-nitrophenyl)azo]-1-naphthyl]acetamidato(2-)]chromate(1-) , compound with dicyclohexylamine (1:1)			
	- 916-865-0 - 01-2120768429-39	Repr. 1B; H360	<= 0,30	wt%

Full Text for all H-phrases and EUH-phrases: pls. see section 16

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing. In case of persisting adverse effects, consult a physician. In case of allergic symptoms, especially respiratory tract related, seek medical help immediately.

After inhalation

Remove affected persons from dangerous area by observing suitable respiratory protection measures. Ensure supply of fresh air.

After skin contact

Rinse hands with plenty of cold or tepid water and soap.

After eye contact

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). Get medical attention if pain still persists.

After ingestion

Rinse the mouth thoroughly with water. Do not induce vomiting. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Alcohol resistant foam, CO₂, powders, water spray

Trade name: BT10441, ink, black

Current version : 1.0.0, issued: 16.06.2021

Replaced version: -, issued: -

Region: IE

Unsuitable extinguishing media

High power water jet

5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Carbon dioxide (CO₂); Carbon monoxide (CO); Nitrogen oxides (NO_x); chromium compounds

5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing. Containers close to fire should be transferred to a safe place. Cool closed containers exposed to fire with water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Refer to protective measures listed in sections 7 and 8. Keep away from ignition sources.

For emergency responders

Personal protective equipment (PPE) - see section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

6.3 Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections

Information regarding safe handling, see section 7. Information regarding personal protective measures, see section 8. Information regarding waste disposal, see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Risks inherent to handling the product must be minimised by applying the appropriate protective and preventive measures. Working processes should - so far as possible, according to the state of the art - be designed to rule out bodily contact or the release of hazardous substances.

General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Do not inhale vapours. Avoid contact with eyes and skin. Wash hands before breaks and after work. Remove contaminated clothing and shoes and launder thoroughly before reusing.

Advice on protection against fire and explosion

Keep away from ignition sources and provide for good ventilation. Vapours can form an explosive mixture with air. Isolate from sources of heat, sparks and open flame. Take precautionary measures against electrostatic loading (earthing necessary during loading operations). Use explosion-proof equipment/fittings and non-sparking tools.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep container tightly closed and dry in a cool, well-ventilated place.

Recommended storage temperature

Value 10 - 25 °C

Requirements for storage rooms and vessels

Containers which are opened must be carefully closed and kept upright to prevent leakage. Always keep in containers of same material as the original.

Incompatible products

Substances to be avoided, see section 10.

7.3 Specific end use(s)

Trade name: BT10441, ink, black

Current version : 1.0.0, issued: 16.06.2021

Replaced version: -, issued: -

Region: IE

Recommendations

Ink for industrial CIJ printers

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Occupational exposure limit values**

No	Substance name	CAS no.	EC no.
1	butanone	78-93-3	201-159-0
	2000/39/EC		
	Butanone		
	WEL short-term (15 min reference period)	900 mg/m ³	300 ppm
	WEL long-term (8-hr TWA reference period)	600 mg/m ³	200 ppm
	List of Chemical Agents and Occupational Exposure Limit Values (Code of Practice)		
	Methyl ethyl ketone		
	WEL short-term (15 min reference period)	900 mg/m ³	300 ppm
	WEL long-term (8-hr TWA reference period)	600 mg/m ³	200 ppm
	Comments	Sk, IOELV	
2	Reaction mass of Amines, C10-14-branched and linear alkyl, [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)] [1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-)		939-191-9
	List of Chemical Agents and Occupational Exposure Limit Values (Code of Practice)		
	Chromium(VI)compounds(as Cr) Water Soluble		
	WEL long-term (8-hr TWA reference period)	0,05 mg/m ³	
	Comments	Carc.1B	
	List of Chemical Agents and Occupational Exposure Limit Values (Code of Practice)		
	Chromium(VI)compounds(as Cr) Water Soluble		
	WEL long-term (8-hr TWA reference period)	0,01 mg/m ³	
	Comments	Carc.1B	
3	Reaction mass of Chromate(1-), [N-[7-hydroxy-8-[(2-hydroxy-5-nitrophenyl)azo]-1-naphthalenyl]acetamidato(2-)] [1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-, hydrogen, compd. with N-cyclohexylcyclohexanamine (1:1) and hydrogen bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalolato(2-)]chromate(1-) , compound with dicyclohexylamine (1:1) and hydrogen bis[N-[7-hydroxy-8-[(2-hydroxy-5-nitrophenyl)azo]-1-naphthyl]acetamidato(2-)]chromate(1-) , compound with dicyclohexylamine (1:1)		916-865-0
	List of Chemical Agents and Occupational Exposure Limit Values (Code of Practice)		
	Chromium(VI)compounds(as Cr) Water Soluble		
	WEL long-term (8-hr TWA reference period)	0,05 mg/m ³	
	Comments	Carc.1B	
	List of Chemical Agents and Occupational Exposure Limit Values (Code of Practice)		
	Chromium(VI)compounds(as Cr) Water Soluble		
	WEL long-term (8-hr TWA reference period)	0,01 mg/m ³	
	Comments	Carc.1B	

DNEL, DMEL and PNEC values**DNEL values (worker)**

Trade name: BT10441, ink, black

Current version : 1.0.0, issued: 16.06.2021

Replaced version: -, issued: -

Region: IE

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	butanone			78-93-3 201-159-0	
	dermal	Long term (chronic)	systemic	1161	mg/kg/day
	inhalative	Long term (chronic)	systemic	600,00	mg/m ³
2	Reaction mass of Amines, C10-14-branched and linear alkyl, [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)] [1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-)			- 939-191-9	
	dermal	Long term (chronic)	systemic	0,02	mg/kg/day
	inhalative	Long term (chronic)	systemic	0,12	mg/m ³
3	Reaction mass of Chromate(1-), [N-[7-hydroxy-8-[(2-hydroxy-5-nitrophenyl)azo]-1-naphthalenyl]acetamidato(2-)] [1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-, hydrogen, compd. with N-cyclohexylcyclohexanamine (1:1) and hydrogen bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-), compound with dicyclohexylamine (1:1) and hydrogen bis[N-[7-hydroxy-8-[(2-hydroxy-5-nitrophenyl)azo]-1-naphthyl]acetamidato(2-)]chromate(1-), compound with dicyclohexylamine (1:1)			- 916-865-0	
	dermal	Long term (chronic)	systemic	0,083	mg/kg/day
	inhalative	Long term (chronic)	systemic	0,588	mg/m ³

DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	butanone			78-93-3 201-159-0	
	oral	Long term (chronic)	systemic	31	mg/kg/day
	dermal	Long term (chronic)	systemic	412	mg/kg/day
	inhalative	Long term (chronic)	systemic	106	mg/m ³
2	Reaction mass of Chromate(1-), [N-[7-hydroxy-8-[(2-hydroxy-5-nitrophenyl)azo]-1-naphthalenyl]acetamidato(2-)] [1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-, hydrogen, compd. with N-cyclohexylcyclohexanamine (1:1) and hydrogen bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-), compound with dicyclohexylamine (1:1) and hydrogen bis[N-[7-hydroxy-8-[(2-hydroxy-5-nitrophenyl)azo]-1-naphthyl]acetamidato(2-)]chromate(1-), compound with dicyclohexylamine (1:1)			- 916-865-0	
	oral	Long term (chronic)	systemic	0,042	mg/kg/day
	dermal	Long term (chronic)	systemic	0,042	mg/kg/day
	inhalative	Long term (chronic)	systemic	0,145	mg/m ³

PNEC values

No	Substance name		CAS / EC no	
	ecological compartment	Type	Value	
1	butanone		78-93-3 201-159-0	
	water	fresh water	55,8	mg/L
	water	marine water	55,8	mg/L
	water	Aqua intermittent	55,8	mg/L
	water	fresh water sediment	284,74	mg/kg
	with reference to: dry weight			
	water	marine water sediment	284,7	mg/kg
	with reference to: dry weight			
	soil	-	22,5	mg/kg
	with reference to: dry weight			

Trade name: BT10441, ink, black

Current version : 1.0.0, issued: 16.06.2021

Replaced version: -, issued: -

Region: IE

	sewage treatment plant	-	709	mg/L
	secondary poisoning	-	1000	mg/kg
	with reference to: food			
2	Reaction mass of Amines, C10-14-branched and linear alkyl, [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)][1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-)		- 939-191-9	
	water	fresh water	0,1	mg/L
	water	Aqua intermittent	1	mg/L
	water	fresh water sediment	70,5	mg/kg dry weight
	water	marine water	0,01	mg/L
	water	marine water sediment	7,05	mg/kg dry weight
	soil	-	14	mg/kg
	sewage treatment plant	-	100	mg/L

8.2 Exposure controls

Appropriate engineering controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL (=Occupational Exposure Limit), suitable respiratory protection must be worn.

Personal protective equipment

Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Respirator Filter A2

Eye / face protection

Tightly fitting safety glasses (EN 166).

Hand protection

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material	butyl rubber		
Material thickness	>	0,5	mm
Breakthrough time	>=	60	min

Other

Normal chemical work clothing.

Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State of aggregation
liquid
Form/Colour
black
Odour

Trade name: BT10441, ink, black

Current version : 1.0.0, issued: 16.06.2021

Replaced version: -, issued: -

Region: IE

ketone-like			
pH value			
No data available			
Boiling point / boiling range			
No data available			
Melting point/freezing point			
No data available			
Decomposition temperature			
No data available			
Flash point			
Value	-7,6 °C		
Source	supplier		
Ignition temperature			
Value	505 °C		
Source	supplier		
Flammability			
No data available			
Lower explosion limit			
Value	1,8 % vol		
Source	supplier		
Upper explosion limit			
Value	11,5 % (m)		
Source	supplier		
Vapour pressure			
No data available			
Relative vapour density			
No data available			
Relative density			
No data available			
Density			
Value	0,9 g/cm³		
Source	supplier		
Solubility			
No data available			
Partition coefficient n-octanol/water (log value)			
No	Substance name	CAS no.	EC no.
1	butanone	78-93-3	201-159-0
log Pow		0,3	
Reference temperature		40	°C
Method		OECD 117	
Source		ECHA	
2	Reaction mass of Amines, C10-14-branched and linear alkyl, [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)][1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-)	-	939-191-9
log Pow		3,00	- 3,80

Trade name: BT10441, ink, black

Current version : 1.0.0, issued: 16.06.2021

Replaced version: -, issued: -

Region: IE

Reference temperature	20	°C
Method	OECD 105	
Source	ECHA	
3	Reaction mass of Chromate(1-), [N-[7-hydroxy-8-[(2-hydroxy-5-nitrophenyl)azo]-1-naphthalenyl]acetamidato(2-)]-[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-, hydrogen, compd. with N-cyclohexylcyclohexanamine (1:1) and hydrogen bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphtholato(2-)]chromate(1-), compound with dicyclohexylamine (1:1) and hydrogen bis[N-[7-hydroxy-8-[(2-hydroxy-5-nitrophenyl)azo]-1-naphthyl]acetamidato(2-)]chromate(1-), compound with dicyclohexylamine (1:1)	
log Pow	3,3	- 4,2
Reference temperature	20	°C
Method	OECD 105	
Source	ECHA	

Viscosity		
Value	appr. 6	mPa*s
Source	supplier	

Solvent content		
Value	75	%

Solids content		
Value	25	%

Particle characteristics		
No data available		

9.2 Other information

Other information		
VOC: 75 %		

SECTION 10: Stability and reactivity

10.1 Reactivity

Dangerous reactions are not expected if the product is handled according to its intended use.

10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions

Dangerous reactions are not to be expected when handling product according to its intended use.

10.4 Conditions to avoid

Heat, naked flames and other ignition sources.

10.5 Incompatible materials

strong oxidizing agents

10.6 Hazardous decomposition products

None, if handled according to intended use.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute oral toxicity			
No	Substance name	CAS no.	EC no.
1	butanone	78-93-3	201-159-0

Trade name: BT10441, ink, black

Current version : 1.0.0, issued: 16.06.2021

Replaced version: -, issued: -

Region: IE

LD50	2054	mg/kg bodyweight
Species	rat	
Method	OECD 423	
Source	ECHA / Read across	
2	Reaction mass of Amines, C10-14-branched and linear alkyl, [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)] [1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-)	939-191-9
LD50	>	10000
Species	rat	
Method	OECD 401	
Source	ECHA	
3	Reaction mass of Chromate(1-), [N-[7-hydroxy-8-[(2-hydroxy-5-nitrophenyl)azo]-1-naphthalenyl]acetamidato(2-)] [1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-, hydrogen, compd. with N-cyclohexylcyclohexanamine (1:1) and hydrogen bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalolato(2-)]chromate(1-) , compound with dicyclohexylamine (1:1) and hydrogen bis[N-[7-hydroxy-8-[(2-hydroxy-5-nitrophenyl)azo]-1-naphthyl]acetamidato(2-)]chromate(1-) , compound with dicyclohexylamine (1:1)	916-865-0
LD50	3250	mg/kg bodyweight
Species	rat	
Method	OECD 401	
Source	ECHA	

Acute dermal toxicity			
No	Substance name	CAS no.	EC no.
1	Reaction mass of Amines, C10-14-branched and linear alkyl, [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)] [1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-)	-	939-191-9
LD50	>	2000	mg/kg bodyweight
Species	rat		
Method	OECD 402		
Source	ECHA		
2	Reaction mass of Chromate(1-), [N-[7-hydroxy-8-[(2-hydroxy-5-nitrophenyl)azo]-1-naphthalenyl]acetamidato(2-)] [1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-, hydrogen, compd. with N-cyclohexylcyclohexanamine (1:1) and hydrogen bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalolato(2-)]chromate(1-) , compound with dicyclohexylamine (1:1) and hydrogen bis[N-[7-hydroxy-8-[(2-hydroxy-5-nitrophenyl)azo]-1-naphthyl]acetamidato(2-)]chromate(1-) , compound with dicyclohexylamine (1:1)	-	916-865-0
LD50	>	2000	mg/kg bodyweight
Species	rat		

Trade name: BT10441, ink, black

Current version : 1.0.0, issued: 16.06.2021

Replaced version: -, issued: -

Region: IE

Method		OECD 402	
Source		ECHA	
Acute inhalational toxicity			
No data available			
Skin corrosion/irritation			
No	Substance name	CAS no.	EC no.
1	butanone	78-93-3	201-159-0
Duration of exposure		4	h
Species		rabbit	
Method		OECD 404	
Source		ECHA / Read across	
Evaluation		non-irritant	
2	Reaction mass of Amines, C10-14-branched and linear alkyl, [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)][1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-)	-	939-191-9
Species		rabbit	
Method		OECD 404	
Source		ECHA	
Evaluation		non-irritant	
3	Reaction mass of Chromate(1-), [N-[7-hydroxy-8-[(2-hydroxy-5-nitrophenyl)azo]-1-naphthalenyl]acetamidato(2-)][1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-, hydrogen, compd. with N-cyclohexylcyclohexanamine (1:1) and hydrogen bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-), compound with dicyclohexylamine (1:1) and hydrogen bis[N-[7-hydroxy-8-[(2-hydroxy-5-nitrophenyl)azo]-1-naphthyl]acetamidato(2-)]chromate(1-), compound with dicyclohexylamine (1:1)	-	916-865-0
Species		rabbit	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
Serious eye damage/irritation			
No	Substance name	CAS no.	EC no.
1	butanone	78-93-3	201-159-0
Species		rabbit	
Method		OECD 405	
Source		ECHA	
Evaluation		irritant	
2	Reaction mass of Amines, C10-14-branched and linear alkyl, [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)][1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-)	-	939-191-9
Species		rabbit	
Method		OECD 405	
Source		ECHA	

Trade name: BT10441, ink, black

Current version : 1.0.0, issued: 16.06.2021

Replaced version: -, issued: -

Region: IE

Evaluation		non-irritant	
3	Reaction mass of Chromate(1-), [N-[7-hydroxy-8-[(2-hydroxy-5-nitrophenyl)azo]-1-naphthalenyl]acetamidato(2-)][1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-, hydrogen, compd. with N-cyclohexylcyclohexanamine (1:1) and hydrogen bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphtholato(2-)]chromate(1-) , compound with dicyclohexylamine (1:1) and hydrogen bis[N-[7-hydroxy-8-[(2-hydroxy-5-nitrophenyl)azo]-1-naphthyl]acetamidato(2-)]chromate(1-) , compound with dicyclohexylamine (1:1)		916-865-0
Species		rabbit	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
Respiratory or skin sensitisation			
No	Substance name	CAS no.	EC no.
1	butanone	78-93-3	201-159-0
Route of exposure		Skin	
Species		guinea pig	
Method		OECD 406	
Source		ECHA	
Evaluation		non-sensitizing	
2	Reaction mass of Amines, C10-14-branched and linear alkyl, [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)][1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-)		939-191-9
Route of exposure		Skin	
Species		mouse	
Method		OECD 429	
Source		ECHA	
Evaluation		sensitizing	
3	Reaction mass of Chromate(1-), [N-[7-hydroxy-8-[(2-hydroxy-5-nitrophenyl)azo]-1-naphthalenyl]acetamidato(2-)][1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-, hydrogen, compd. with N-cyclohexylcyclohexanamine (1:1) and hydrogen bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphtholato(2-)]chromate(1-) , compound with dicyclohexylamine (1:1) and hydrogen bis[N-[7-hydroxy-8-[(2-hydroxy-5-nitrophenyl)azo]-1-naphthyl]acetamidato(2-)]chromate(1-) , compound with dicyclohexylamine (1:1)		916-865-0
Route of exposure		Skin	
Species		mouse	
Method		OECD 429	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
Germ cell mutagenicity			
No	Substance name	CAS no.	EC no.
1	butanone	78-93-3	201-159-0
Type of examination		in vitro gene mutation study in bacteria	
Species		Salmonella typhimurium	
Method		OECD 471	

Trade name: BT10441, ink, black

Current version : 1.0.0, issued: 16.06.2021

Replaced version: -, issued: -

Region: IE

Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.
Type of examination	In vitro Mammalian Chromosomal Aberration Test
Species	rat
Method	OECD 473
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.
Type of examination	In vitro mammalian cell gene mutation test
Species	Mouse lymphoma cells
Method	OECD 476
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.
Type of examination	In vivo mammalian somatic cell study: cytogenicity / erythrocyte micronucleus
Species	mouse
Method	OECD 474
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.
2	Reaction mass of Amines, C10-14-branched and linear alkyl, [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)] [1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-)
Method	OECD 471
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.
Reproduction toxicity	
No	Substance name
CAS no.	EC no.
1	butanone
78-93-3	201-159-0
Route of exposure	inhalational
Type of examination	Prenatal Developmental Toxicity Study
Species	rat
Method	OECD 414
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.
2	Reaction mass of Amines, C10-14-branched and linear alkyl, [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)] [1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-)
Route of exposure	oral
NOAEL	5 mg/kg bw/d
Species	rat
Method	OECD 422
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are met.
3	Reaction mass of Chromate(1-), [N-[7-hydroxy-8-[(2-hydroxy-5-nitrophenyl)azo]-1-naphthalenyl]acetamidato(2-)] [1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-, hydrogen, compd. with N-cyclohexylcyclohexanamine (1:1) and hydrogen bis[1-[(2-hydroxy-5-nitrophenyl)azo]-
	916-865-0

Trade name: BT10441, ink, black

Current version : 1.0.0, issued: 16.06.2021

Replaced version: -, issued: -

Region: IE

2-naphtholato(2-)]chromate(1-) , compound with dicyclohexylamine (1:1) and hydrogen bis[N-[7-hydroxy-8-[(2-hydroxy-5-nitrophenyl)azo]-1-naphthyl]acetamidato(2-)]chromate(1-) , compound with dicyclohexylamine (1:1)	
Species	rat
Method	OECD 422
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are met.

Carcinogenicity			
No	Substance name	CAS no.	EC no.
1	butanone	78-93-3	201-159-0
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

STOT - single exposure
No data available

STOT - repeated exposure			
No	Substance name	CAS no.	EC no.
1	butanone	78-93-3	201-159-0
Route of exposure		inhalational	
Species		rat	
Method		OECD 413	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
2	Reaction mass of Amines, C10-14-branched and linear alkyl, [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)] [1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-)	-	939-191-9
Route of exposure		oral	
NOAEL		15	mg/kg bw/d
Species		rat	
Target organ		whole body	
Method		OECD 422	
Source		ECHA	
Effects		May cause damage to organs through prolonged or repeated exposure	
Evaluation/classification		Based on available data, the classification criteria are met.	

Aspiration hazard
No data available

11.2 Information on other hazards

Endocrine disrupting properties

No data available.

Other information

No data available.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)			
No	Substance name	CAS no.	EC no.

Trade name: BT10441, ink, black

Current version : 1.0.0, issued: 16.06.2021

Replaced version: -, issued: -

Region: IE

1	butanone	78-93-3	201-159-0
LC50		2993	mg/l
Duration of exposure		96	h
Species	Pimephales promelas		
Method	OECD 203		
Source	ECHA		
2	Reaction mass of Amines, C10-14-branched and linear alkyl, [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)][1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-)		
LC50		100	mg/l
Duration of exposure		96	h
Species	Danio rerio		
Method	OECD 203		
Source	ECHA		

Toxicity to fish (chronic)

No data available

Toxicity to Daphnia (acute)

No	Substance name	CAS no.	EC no.
1	butanone	78-93-3	201-159-0
EC50		308	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Method	OECD 202		
Source	ECHA		
2	Reaction mass of Amines, C10-14-branched and linear alkyl, [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)][1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-)		
EC50		100	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Method	OECD 202		
Source	ECHA		

Toxicity to Daphnia (chronic)

No data available

Toxicity to algae (acute)

No	Substance name	CAS no.	EC no.
1	butanone	78-93-3	201-159-0
EC50		2029	mg/l
Duration of exposure		96	h
Species	Pseudokirchneriella subcapitata		
Method	OECD 201		
Source	ECHA		

Toxicity to algae (chronic)

No data available

Trade name: BT10441, ink, black

Current version : 1.0.0, issued: 16.06.2021

Replaced version: -, issued: -

Region: IE

Bacteria toxicity

No data available

12.2 Persistence and degradability

Biodegradability			
No	Substance name	CAS no.	EC no.
1	butanone	78-93-3	201-159-0
Type		aerobic biodegradation	
Value		98	%
Duration		28	day(s)
Method		OECD 301 D	
Source		ECHA	
Evaluation		readily biodegradable	
2	Reaction mass of Amines, C10-14-branched and linear alkyl, [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)][1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-)	-	939-191-9
Value		3	%
Duration		28	day(s)
Method		OECD 301 B	
Source		ECHA	
Evaluation		not readily biodegradable	

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log value)			
No	Substance name	CAS no.	EC no.
1	butanone	78-93-3	201-159-0
log Pow		0,3	
Reference temperature		40	°C
Method		OECD 117	
Source		ECHA	
2	Reaction mass of Amines, C10-14-branched and linear alkyl, [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)][1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-) and Amines, C10-14-branched and linear alkyl, bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-)	-	939-191-9
log Pow		3,00	- 3,80
Reference temperature		20	°C
Method		OECD 105	
Source		ECHA	
3	Reaction mass of Chromate(1-), [N-[7-hydroxy-8-[(2-hydroxy-5-nitrophenyl)azo]-1-naphthalenyl]acetamidato(2-)][1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]-, hydrogen, compd. with N-cyclohexylcyclohexanamine (1:1) and hydrogen bis[1-[(2-hydroxy-5-nitrophenyl)azo]-2-naphthalenolato(2-)]chromate(1-), compound with dicyclohexylamine (1:1) and hydrogen bis[N-[7-hydroxy-8-[(2-hydroxy-5-nitrophenyl)azo]-1-naphthyl]acetamidato(2-)]chromate(1-), compound with dicyclohexylamine (1:1)	-	916-865-0

Trade name: BT10441, ink, black**Current version :** 1.0.0, issued: 16.06.2021**Replaced version:** -, issued: -**Region:** IE

log Pow	3,3	-	4,2	
Reference temperature			20	°C
Method	OECD 105			
Source	ECHA			

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	
PBT assessment	No data available.
vPvB assessment	No data available.

12.6 Endocrine disrupting properties

No data available.

12.7 Other adverse effects

No data available.

12.8 Other information

Other information
Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Product**

Disposal of the product should be carried out in accordance with all applicable regulations following consultation with the responsible local authority and the disposal company in an authorised and suitable disposal facility.

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Used, completely emptied, packaging may be disposed of or passed to recovery systems in compliance with national and local provisions related to waste legislation. Like the unused product, the packaging that has not been emptied, may be disposed of or passed to recovery systems in compliance with national and local provisions related to waste legislation.

SECTION 14: Transport information**14.1 Transport ADR/RID/ADN**

Class	3
Classification code	F1
Packing group	II
Hazard identification no.	33
UN number	UN1210
Proper shipping name	PRINTING INK
Special Provision 640	640C
Tunnel restriction code	D/E
Label	3

14.2 Transport IMDG

Class	3
Packing group	II
UN number	UN1210
Proper shipping name	PRINTING INK
EmS	F-E, S-D
Label	3

14.3 Transport ICAO-TI / IATA

Class	3
Packing group	II
UN number	UN1210

Trade name: BT10441, ink, black

Current version : 1.0.0, issued: 16.06.2021

Replaced version: -, issued: -

Region: IE

Proper shipping name
Label

Printing ink
3

14.4 Other information

No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user

No data available.

14.7 Maritime transport in bulk according to IMO instruments

Not relevant

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES

The product is considered being subject to REACH regulation (EC) 1907/2006 annex XVII.	No 3, 40
--	----------

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances

This product is subject to Part I of Annex I, risk category:	P5b
--	-----

Other regulations

Adhere to the national sanitary and occupational safety regulations when using this product.

15.2 Chemical safety assessment

A Chemical Safety Assessment has been carried out for one or more of the substances within this mixture.

SECTION 16: Other information

Sources of key data used to compile the data sheet:

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

H360 May damage fertility or the unborn child

H373 May cause damage to organs through prolonged or repeated exposure

Creation of the safety data sheet

UMCO GmbH - D-21107 Hamburg, Georg-Wilhelm-Strasse 187, Tel.: +49(40)555 546 300, Fax: +49(40)555 546 357, e-mail: umco@umco.de

This information is based on our present knowledge and experience.

Trade name: BT10441, ink, black

Current version : 1.0.0, issued: 16.06.2021

Replaced version: -, issued: -

Region: IE

The safety data sheet describes products with a view to safety requirements.
It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

Document protected by copyright. Alterations or reproductions require the express written permission of UMCO GmbH.
Prod-ID 777349