Technical Data Sheet

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100
Standard Ink Refills



Technical Data Sheet Applicable To:

100-i54	Standard Refill Green Ink

Industry Usage
These refills are perfect for our HD Retractable, Elephant Retractable, Stainless Steel Retractable and Metal Stick pens and are fully detectable (excluding Ink)

Features and Benefits

- Metal detectable and X-ray visible
- Manufactured from detectable shatter proof plastic
- Writing length approx. 9,400M (30,840")
- Fully detectable housing and end cap
- For ambient conditions between 0°c and 30°c (32 to 86°f)

- Writing line width 1mm (39.4mils)

Material and Compliance Information:

The above is manufactured using pigments which are in accordance with: -

- European Resolution AP (89) 1
- Recommendation IX of the BfR for colouring plastics
- EN71-3 Toy regulation
- EU regulation EU No 2019/1381 amending Regulation EU No 1935/2004
- Is based on a polymer carrier that is compliant with: -
- EU regulation EU No 2020/1245 amending and correcting Regulation (EU) No 10/2011
- EU regulation EU No 2019/1381 amending Regulation EU No 1935/2004

• Has been produced according to Regulation 2023/2006/EC on good manufacturing practice for materials and articles intended to come into contact with food, applicable to plastic raw materials.

This compliance statement is based on information supplied by the polymer and pigment manufacturers, migration testing according to Regulation 10/2011, migration modelling and quality control systems in place at Detectamet.

REACH – No substances of very high concern (SVHC) above the 0.1% weight (w/w) threshold limit are present in the materials.

Regulations and Standards

We confirm that the above-mentioned products are suitable for use in contact with all food types and are in conformity with the applicable requirements of the following regulations and standards:

• Regulation (EC) no.1935/2004 on Materials and Articles intended to come into contact with food.

• Commission Regulation (EU) No.10/2011 on Plastic materials intended to come into contact with food including its updates Regulation 1282/2011 and Regulation 1183/2012.

• Regulation (EC) no. 2023/2006 on Good Manufacturing Practice for materials and articles intended to come into contact with food.

• Council of Europe Resolution AP 89/1 on the use of Colorants in Plastic Materials coming into contact with food.

• US FDA 21 CFR 177.1520 (Olefin polymers) with colorants and additives cleared for use through listing in 178.3297 (Colorants for polymers), 178.2010 (antioxidants and/or stabilisers for polymers, or other respective parts of the FDA regulations.

Migration test data obtained under short-term repeat use test conditions (6dm2/kg food) has demonstrated that levels of overall migration and specific migration of additives from these products will not exceed the legal limits with all food types.

Test Simulants	Food Types	Testing Condition
A-C, D1, D2 of Regulation No. 10,2011 for Plastic Materials and Articles in contact with food.	All dry, aqueous, acidic, alcoholic and fatty foods.	2 hours at 70C, Repeat use. Test OM3 of regulation 10/2011

2 hours at 70C, Repeat use. Test OM3 of regulation 10/2011

Dual-use food additives may be present but any migration into food will be minimal.

This compliance statement is based on information supplied by the polymer and pigment manufacturers, migration testing according to Regulation 10/2011, migration modelling and quality control systems in place at Detectamet.

General Information:

Maximum use Temperature: 100 °c

Maximum wash Temperature: 121

°c

Maximum use Temperature: Do not store at deep freeze temperatures prior to use.

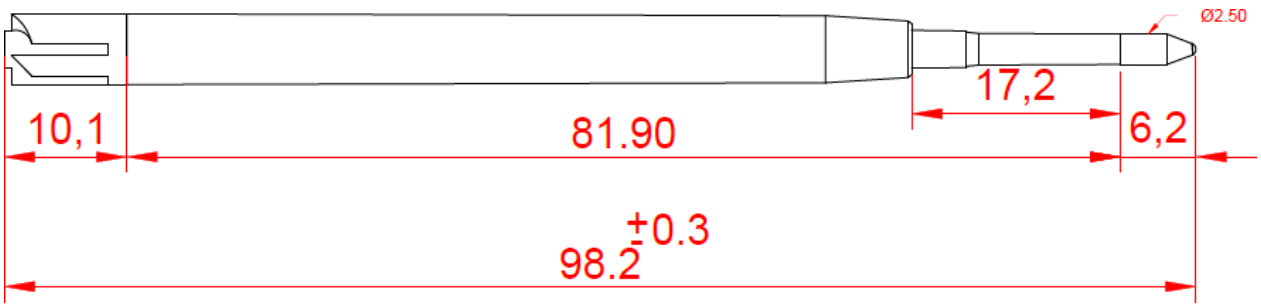
Cleaning:

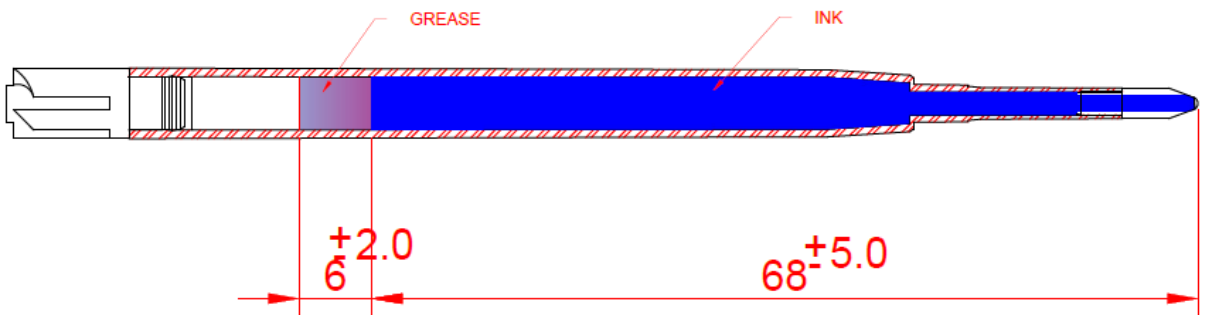
It is recommended that prior to and after use, scrapers are cleaned, disinfected & sterilized, as appropriate to their intended use (to minimise risk of microbial Growth and cross contamination, maximizing their efficiency and durability).

Refill Flight

The above is manufactured using pigments which are in accordance with: -

- Is manufactured using pigments which are in accordance with
- European Resolution AP (89) 1
- Recommendation IX of the BfR for colouring plastics
- Is manufactured using pigments which are compliant to –
- EN71-3 Toy regulation
- Is based on a polymer carrier that is compliant with: -
- EU regulation EU No 10/2011 as amended





All dimensions are in mm

Hazard(s) identification

Classification of the substance or mixture G

HS07



Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.

· Information concerning particular hazards for human and environment:

The product has to be labeled due to the calculation procedure of international guidelines.

· Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

· Label elements

· Labelling according to EU guidelines:

The product has been classified and marked in accordance with directives on hazardous materials.

· Hazard-determining components of labeling:

2-Phenoxyethanol

· Safety phrases:

Keep out of the reach of

children. Avoid contact with

skin and eyes.

Do not empty into drains, dispose of this material and its container at hazardous or special

waste collection point.

Wear suitable gloves.

If swallowed, seek medical advice immediately and show this container or label.

Classification system:

NFPA ratings (scale 0 - 4)

Health = 1
Fire = 1
Reactivity = 0

HMIS-ratings (scale 0 - 4)
Health = 1 1
Fire = 1
Reactivity = 0

Other Hazards:

Results of PBT and vPvB

assessment PBT: Not

applicable.

vPvB: Not applicable.

Composition/information on ingredients

Chemical characterization: Mixtures

· *Description: Mixture: consisting of the following components.*

Dangerous components:		
122-99-6	*2-Phenoxyethanol*	*38-45%*
100-51-6	*Benzyl alcohol*	*6-10%*
110-98-5	*1,1'-oxydipropan-2-ol*	*3-7%*
112-90-3	*(Z)-octadec-9-enylamine*	*0.5-2%*
12645-31-7	*Phosphoric acid, mono- and bis(2-ethylhexyl) esters*	*0.1-1%*
Non-Dangerous components:		
111-90-0	*Ethyl carbitol*	*1-3%*
9003-39-8	*Polyvinyl pyrrolidone*	*0.1-0.5%*
25054-06-2	*Formaldehyde, polymer with cyclohexanone*	*20-35%*
1328-51-4 1330-38-7	*Solvent Blue 38*	*5-10%*
19125-99-6 12226-96-9	*2-butyl-6-(butylamino)-1H-benz[de]isoquinoline-1,3(2H)-dione 1-*	*1-4%*

First-aid measures

· Description of first aid measures

· General information:

Consult Physician.Show this safety data sheet to doctor in attendence.

· After inhalation:

Supply fresh air; consult doctor in case of complaints.

In case of unconsciousness place patient stably in side position for transportation.

· *After skin contact: Immediately wash with water and soap and rinse thoroughly.*

· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· *After swallowing: Rinse mouth with water. Immediately call a doctor.*

· *Most important symptoms and effects, both acute and delayed No further relevant information available.*

· *Information for doctor: Treat symptomatically and supportively.*

· *Indication of any immediate medical attention and special treatment needed No further relevant information available.*

Fire-fighting measures

Extinguishing media

Suitable extinguishing agents:

CO2, dry chemical powder, water spray, or alcohol resistant foam.

Special hazards arising from the substance or mixture Formation of toxic gases is possible during heating or in case of fire. Carbon oxides

Advice for firefighters

Protective equipment: Wear fully protective suit.

Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Wear suitable protective clothing and gloves.

Environmental precautions: Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Keep in suitable, closed containers for disposal.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection

equipment. See Section 13 for disposal information.

Handling and storage

Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.

Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Conditions for safe storage, including any incompatibilities Storage:

Requirements to be met by storerooms and receptacles:

Store in a tightly closed container.

Information about storage in one common storage facility:

Store away from direct sources of heat.

Further information about storage conditions: Keep receptacle tightly sealed. Specific

end use(s)

Used as inks for sketch pens, fine liners, and all kinds of writing instruments.

Exposure controls/personal protection

Additional information about design of technical systems:

Handle in accordance with good industrial hygiene and safety practice.

· Components with limit values that require monitoring at the workplace:

100-51-6 Benzyl alcohol

WEEL Long-term value: 10 ppm

111-90-0 2-(2-ethoxyethoxy)ethanol

WEEL Long-term value: 25 ppm

Exposure controls

· Personal protective equipment:

· *General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work.*

Avoid contact with the eyes and skin.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:

 Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material

cannot be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to

Eye protection:

Tightly sealed goggles 

Body protection:

Apron Boots

Physical and chemical properties

· Information on basic physical and chemical properties · General Information Appearance: Form: Colour: Odor:	Fluid According to product specification Characteristic Fluid According to product specification Characteristic
Change in condition. Melting point/Melting range: Boiling point/Boiling range:	Undetermined. 205 °C (401 °F)
Flash point:	101 °C (214 °F)
Ignition temperature:	435 °C (815 °F)
Auto igniting:	Product is not self igniting.
Danger of explosion:	Product does not present an explosion hazard.
Vapor pressure at 20 °C (68 °F):	0.1 hPa
Density:	Not determined.
Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity: Dynamic: · Other information	Not determined. No further relevant information available.

Toxicological Information

Information on toxicological effects
· Acute toxicity:

Information on toxicological effects · Acute toxicity: · LD/LC50 values that are relevant for classification: 122-99-6 2-Phenoxyethanol		
Oral Dermal	LD50 LD50	2740 mg/kg (rat) 5000 mg/kg (rabbit)

· Primary irritant effect:

· *on the skin: May cause skin irritation.*

on the eye: Irritating effect.

CAS: 122-99-6

The substance was found to cause fully irreversible effects to rabbit eye in a study performed as per OECD guideline no. 405

Additional toxicological information:

Harmful
Irritant

Carcinogenic categories

IARC (International Agency for Research on Cancer)
None of the ingredients is listed.
NTP (National Toxicology Program)
None of the ingredients is listed.
OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients is listed.

Ecological information Ecological

Toxicity

· Aquatic toxicity:

Justification for aquatic classification:

As the substance Oleyl Amine (CAS No. 112-90-3), having classification as Aquatic Acute 1 and Aquatic chronic 1, contributes only 1% in the final mixture, so the classification of mixture is considered as

Aquatic Chronic 3.

· *Persistence and degradability No further relevant information available.*

· *Bioaccumulative potential No further relevant information available.*

· *Mobility in soil No further relevant information available.*

· Additional ecological information:

· General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· Results of PBT and vPvB assessment

· *PBT: Not applicable.*

· *vPvB: Not applicable.*

· *Other adverse effects No further relevant information available.*

Disposal considerations

· Waste treatment methods

· Recommendation:

Dispose off waste material according to local, state and federal regulations.

· Uncleaned packagings:

· *Recommendation: Disposal must be made according to official regulations.*

14 *Transport information*

· UN-Number	
· DOT, ADR, ADN, IMDG, IATA	Not applicable
· UN proper shipping name	
· DOT, ADR, ADN, IMDG, IATA	Not applicable
· Transport hazard class(es)	
· DOT, ADR, ADN, IMDG, IATA	
· Class	Not applicable
· Packing group	
· DOT, ADR, IMDG, IATA	Not applicable
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	-

15 Regulatory information

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

Section 355 (extremely hazardous
substances): None of the ingredients is listed.
Section 313 (Specific toxic chemical listings):
None of the ingredients is listed.
TSCA (Toxic Substances Control Act):

100-51-6	Benzyl alcohol
111-90-0	2-(2-ethoxyethoxy)ethanol
110-98-5	1,1'-oxydipropan-2-ol
112-90-3	(Z)-octadec-9-enylamine
9003-39-8	Polyvinyl pyrrolidone
1330-38-7	Solvent Blue 38
19125-99-6	Solvent Yellow 43
12645-31-7	Ethylhexyl Phosphoric Acid Ester

· Chemicals known to cause cancer:
None of the ingredients is listed.
· Chemicals known to cause reproductive toxicity for females:
None of the ingredients is listed.
· Chemicals known to cause reproductive toxicity for males:
None of the ingredients is listed.
· Chemicals known to cause developmental toxicity:
None of the ingredients is listed.

· EPA (Environmental Protection
Agency) None of the ingredients is listed.
· TLV (Threshold Limit Value established by
ACGIH) TLV (ACGIH):1000 ppm.
· NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients is listed.

If swallowed, seek medical advice immediately and show this container or label.

National regulations:

Other regulations, limitations and prohibitive regulations

User to follow national laws and regulations.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing SDS: Product safety department.

Date of preparation / last revision 29/06/2015 / 29/10/2018

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods DOT: US

Department of Transportation IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA) LC50: Lethal

concentration, 50 percent LD50: Lethal dose, 50 percent

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

Sources

Occupational Safety & Health Administration (OSHA)
https://www.osha.gov/Publications/OSHA3514.html

Data from registration Dossier for CAS: 122-99-6 published on ECHA website
http://apps.echa.europa.eu/registered/data/dossiers/DISS-9d9ec9aa-68cf-6ad9-e044- 00144f67d249/DISS-9d9ec9aa-68cf-6ad9-e044-00144f67d249 DISS-9d9ec9aa-68cf- 6ad9- e044-00144f67d249.html

Data from registration Dossier for CAS: 6786-83-0 published on ECHA website
http://apps.echa.europa.eu/registered/data/dossiers/DISS-d6b29d59-d4e7-5966-e044- 00144f67d031/DISS-d6b29d59-d4e7-5966-e044-00144f67d031 DISS-d6b29d59-d4e7-
5966-

e044-00144f67d031.html

· * Data compared to the previous version altered.

Section 2: Hazard Identification – Changes in classification and Labelling Section 3: Composition/information on ingredients

Section 4: First aid measures Section 5: Firefighting measures

Section 6: Accidental Release Measures Section 7: Handling and Storage

Section 8: Exposure Controls / Personal Protection Section 10: Stability and Reactivity

Section 11: Toxicological Information Section 12: Ecological Information Section 13: Disposal Considerations Section 14: Transport Information Section 15: Regulatory Information

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