1	CHEMICAL PRODUCT AND COMPANY IDENTIFICATION		
1.1	Product name	INKS – WASHABLE GROUP Colour and codes details are indicated in section n. 16	
	Relevant identified uses of the	INK FOR WRITING MARKERS	
1.2	substance or mixture and uses advised against	USES ADVIDED AGAINST: the product is not intended for use in the food industry and for cosmetic use (humans or animals). Do not use for other purposes	
	Company name	HAINENKO LIMITED	
	Address	284 Chase Road, London, N14 6HF UNITED KINGDOM	
1.3	Telephone number	020 8882 8734	
1.3	Fax number	020 8882 7749	
	E-mail address of the competent person responsible for Safety Data Sheet	sales@hainenko.com	
1.4	Emergency telephone number	020 8882 8734	

2	HAZARDS IDENTIFICATION		
	GHS Symbols and hazard labelling according to Reg. 1272/2008/EC		
	DEFINITION	MIXTURE	
	HAZARD CLASSIFICATION	Not hazardous	
2.1	GHS PICTOGRAMS	No signal word	
2.1		No GHS PICTOGRAMS	
	HAZARDS TO HUMAN	CLASSIFICATION CRITERIA ARE NOT MET	
	CHEMICAL AND PHYSICALS HAZARDS	CLASSIFICATION CRITERIA ARE NOT MET	
	HAZARDS TO ENVIRONMENT	CLASSIFICATION CRITERIA ARE NOT MET	
		Label elements	
	No SIGNAL WORD		
2.2	No GHS PICTOGRAM		
		Hazard statements	
	None		

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SAFETY DATA SHEET According to Reg. 1272/2008/EC and Reg. 830/2015/EU

	Precautionary statements None		
	Substances on label		
	Special Provisions	None	
	Special provisions according to Annex XVII of REACH and subsequent amendments	None	
		Other hazards	
2.3	The mixture meets criteria for PBT according to Reg. (EC) 1907/2006, all. XIII	Not applicabile	
	The mixture meets the criteria for vPvB according to Reg.(EC) 1907/2006, all. XIII	Not applicabile	
	Other hazards	None	

3 COMPOSIZIONE/INFORMAZIONE SUGLI INGREDIENTI 3.1 Substances: not applicable

3.2 Mixtures: WATER BASED INK. NOT HAZARDOUS BLEND OF DYESTUFFS AND PROCESS CHEMICALS

None			Reg. UE 1272/2008	Reg. 1272/2008/CE	
Chemical name of hazardous substances	CAS N.	EC N.	Pictograms	Classification, Hazard statements H The full text of the Hazard statementsis in section 16	Conc. [%]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, meet the PBT or vPvB criteria or are considered to be of equivalent concern substances or substances which It has been assigned a workplace exposure limit and hence require reporting in this section.

The upper limits of the ranges of concentration are excluded

Occupational exposure limits, if available, are listed in Section 8

4	FIRST AID MEASURES		
	Description of first aid meas	ures	
4.1	Eye contact	Irrigate with a suitable eye solution or water for ten minutes –obtain medical attention.	
	Skin contact	Remove any contaminated clothing. Wash with soap & flowing water.	
	Swallowing	Give plenty to drink if ingestion is suspected. DO NOT induce vomiting and consult a physician.	
	Inhalation	Not applicable	
	Protection of rescuers	No action shall be got involving any personal risk or without proper training	
	Other informations	None	
	Most important symptoms ar	nd effects, acute and delayed	
4.2	Inhalation	Symptoms: Effects:	
	Skin contact	Symptoms: Effects:	
	Eye contact	Symptoms: Effects:	

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	Ingestion	Symptoms: nausea, abdominal pain, haemorrhagic vomiting, diarrhea, choking, coughing, severe respiratory failure Effects: If ingested, it causes irritation to the mouth, throat, esophagus and stomach	
	Medical attention and special treatment	No specific treatment is not known	
5	FIRE FIGHTING MEASURES		
5.1	Suitable extinguishing agents	This product is water based and is not flammable. In the event of a fire the following extinguishing means can be used: carbon dioxide (CO2), foam, chemical powders, in the case of fires of considerable size, also sprayed water jet	
5.2	Unsuitable extinguishing agents for safety reasons	Water is not effective to extinguish the fire, but can be used to cool containers exposed to flames to prevent fires and explosions	
5.3	Special hazards caused by the substance and its combustion products or resulting gases	In case of fire, if long time exposed to high temperature, it may decompose and develop hazardous substances such as carbon oxides, heavy smokes and traces of sulfur oxides, nitrogen oxides and other decomposition substances	
5.4	Protective equipment	Use protection for the respiratory tract. Cool fire exposed containers with water	
5.5	Recommendations for Fire Extinguishers	Cool containers with water jets to avoid product decomposition and the development of substances potentially hazardous to health. Always wear complete fire protection equipment. Collect extinguishing water that should not be discharged into drains. Dispose of contaminated water used for fire extinguishing and residues in accordance with current regulations. Use normal fire fighting clothing such as an open-air compressor (EN 137), full flame retardant (EN469), flame retardant gloves (EN 659) and boots for firefighters (HO A29 or A30).	
6	ACCIDENTAL RELEASE MEA	SURES	
	Personal precautions, protective equipment and procedures in case of emergency		
6.1	Person-related safety precautions	Avoid contact with eyes and ingestion	
6.1	Person-related safety precautions Measures for environmental protection	Avoid contact with eyes and ingestion Prevent contamination of soil and water. Refer to Sections 8.0 and 13.0 for additional information on Exposure and Disposal. Do not allow product to reach sewage system or any water course	
6.1	Measures for environmental	Prevent contamination of soil and water. Refer to Sections 8.0 and 13.0 for additional information on Exposure and Disposal.	
6.1	Measures for environmental protection	Prevent contamination of soil and water. Refer to Sections 8.0 and 13.0 for additional information on Exposure and Disposal. Do not allow product to reach sewage system or any water course Collect residues in a container identified, refer to Section 13 for disposal	
6.1	Measures for environmental protection Additional informations	Prevent contamination of soil and water. Refer to Sections 8.0 and 13.0 for additional information on Exposure and Disposal. Do not allow product to reach sewage system or any water course Collect residues in a container identified, refer to Section 13 for disposal	
6.1	Measures for environmental protection Additional informations Methods and materials for conta	Prevent contamination of soil and water. Refer to Sections 8.0 and 13.0 for additional information on Exposure and Disposal. Do not allow product to reach sewage system or any water course Collect residues in a container identified, refer to Section 13 for disposal inment and cleaning Collect mechanically.	
	Measures for environmental protection Additional informations Methods and materials for conta Measures for cleaning/collecting (small spill) Measures for cleaning/collecting	Prevent contamination of soil and water. Refer to Sections 8.0 and 13.0 for additional information on Exposure and Disposal. Do not allow product to reach sewage system or any water course Collect residues in a container identified, refer to Section 13 for disposal inment and cleaning Collect mechanically. Treat washing waste water according to local environmental regulation. Collect mechanically. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Treat washing waste water according to local environmental regulation Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas and	
6.2	Measures for environmental protection Additional informations Methods and materials for conta Measures for cleaning/collecting (small spill) Measures for cleaning/collecting (large spill)	Prevent contamination of soil and water. Refer to Sections 8.0 and 13.0 for additional information on Exposure and Disposal. Do not allow product to reach sewage system or any water course Collect residues in a container identified, refer to Section 13 for disposal inment and cleaning Collect mechanically. Treat washing waste water according to local environmental regulation. Collect mechanically. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Treat washing waste water according to local environmental regulation Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas and	
	Measures for environmental protection Additional informations Methods and materials for conta Measures for cleaning/collecting (small spill) Measures for cleaning/collecting (large spill) Reference to other sections	Prevent contamination of soil and water. Refer to Sections 8.0 and 13.0 for additional information on Exposure and Disposal. Do not allow product to reach sewage system or any water course Collect residues in a container identified, refer to Section 13 for disposal inment and cleaning Collect mechanically. Treat washing waste water according to local environmental regulation. Collect mechanically. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Treat washing waste water according to local environmental regulation Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas and dispose in accordance with local regulations.	

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7	HANDLING AND STORAGE		
7.1	Handling, Directions for safe handling	Verify the integrity of the markers and handling. Handle the containers with care. Avoid contact with eyes, avoid ingestion. Do not smoke in work and storage areas.	their boxes and containers before
7.2	Storage	Store the original containers, tightly closed sources. Keep container closed before an impermeable floor creating drip pans Protefalls. Keep away from food, drinks and animal fee	nd after use. Use storage areas with ect the container against impacts and
7.3	Specific end uses	Ink of writing markers	
		1	
8	EXPOSURE CONTROLS / PE	RSONAL PROTECTION	
0 1	Control parameters	Component substance	Value
8.1	Control parameters	No available data	
	Exposure control		
	Recommended monitoring procedures	Use and manage the marker ink in the proper us	se
	Individual protection measures	The ink is not classified hazardous. In the context of its use in articles such as ink for writing and according to the type of process and industrial processing (storage, loading cartridges and packaging of markers and pens), provide for a replacement of air and / or exhaust sufficient in 'work environment and deposit, in order to maintain the environmental concentrations below the applicable exposure limits. Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.	
	Environmental protection devices	Avoid polluting water	
	Respiratory protection	Not necessary in normal use	
8.2	Eyes protection	Not necessary in normal use. During the indust in case of significant risk of splashing and expos and approved under appropriate government st (EU)	ure, use devices for eye protection tested
	Hands protection	Not necessary in normal use. During the industrial production process of wri splashing and exposure, use chemical resistar direct and prolonged contact - recommendatior residence time> 480 min (EN374). Eg PVC - 0.7 of types. It is advisable to follow the instructions	nt gloves (EN374); materials suitable for n: protection factor 6, corresponding to a 7 mm in thickness due to the wide variety

Skin protection	Not necessary in normal use. In the context of the industrial process of production of articles for writing Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of product handled
Other informations	Keep away from foodstuffs. Wash hands thoroughly after handling the product. Keep working clothes separately. Immediately remove contaminated clothing. Follow the local Safety Management standards and instructions.

9	PHYSICAL AND CHEMICAL PROPERTIES		
	Information on basic physical and chemical properties		
	Appearance	Liquid	
	Colour	Different colours and shades	
	PH	6,5 ± 1	
	Odour	Odourless	
	Odour threshold	No available data	
	Viscosity	No available data	
	Density	$1,040 \pm 0,01 \text{ g/cm}^3$	
	Density of vapours (air = 1)	Not applicable	
9.1	Flash point	Not applicable	
	Melting temperature	≤0°C	
	Boiling temperature	≥ 100°C	
	Self-ignition temperature	Not applicable	
	Explosive range	Not applicable	
	Comburent properties	Not applicable	
	Vapour pressure at 20°C	23,4 HPa (water)	
	Water solubility	Soluble	
	Partition coefficient n- octanol/water (log Pow)	Propylene glicol = -1,07	
0.0	Other informations		
9.2	VOC (Directive 2010/75/CE)	< 0,1%	

10	STABILITY AND REACTIVITY		
10.1	Reactivity Stable in normal conditions. No further relevant information available		
10.2	Chemical stability	Stable under normal conditions of handling and storage	
10.3	Possibility of dangerous reactions	No dangerous reactions are known	
10.4	Conditions to avoid	Avoid strong overheating.	
10.5	Incompatible materials	Strong acids, strong oxidisers	
10.6	Hazardous decomposition products	No further relevant information available	

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11	TOXICOLOGICAL INFORMATIONS		
	Toxicological effects		
	Acute toxicity	CALCULATED ACCORDING TO THE NOT HAZARDOUS CHEMICAL COMPOSITION LD50 (Oral, rat): > 10000 mg/kg LD50 (Skin, rabbit): > 10000 mg/kg	
	Chronic toxicity	Classification criteria are not met	
	Effect on eye	Classification criteria are not met	
11.1	Effect on skin	Classification criteria are not met	
	Inhalation	Classification criteria are not met	
	Sensitisation	Classification criteria are not met	
	Ingestion	Classification criteria are not met	
	Toxic effect by skin contact	Classification criteria are not met	
	Specific Target Organ Toxicity (STOT) — single or repente exposure	Classification criteria are not met	
	Hazards by aspiration	Classification criteria are not met.	
	CMR properties		
11.2	Carcinogenicity	Classification criteria are not met	
11.2	Mutagenicity	Classification criteria are not met	
	Toxicity for reproduction	Classification criteria are not met	
11.3	Short and long term exposures: immediate, delayed and chronic effects		
	No available data		
12	ECOLOGICAL INFORMATION	IS	
12.1	Acute toxicity	The components of the product are not classified as hazardous to the environment.	
	Tiouto toxiony	Long-term effects: no avalilable data	
12.2	Persistence and degradability	All organic components present in the mixture are biodegradable.	
12.3	Bioaccumulative potential	No bioaccumulation components are used	
12.4	Mobility in soil	Because of the physical properties and chimica composition, a high soil mobility is expected	
12.5	Results of PBT and vPvB assessment	For evaluations of the PBT and vPvB assessment of the substances/mixtures contained in the product, see the information on the individual components. This mixture contains no substances evaluated persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB).	
12.6	Other adverse effects	None. This mixture does not contains halogenated organic compounds (AOX). Avoid pollution of waste water or entering soils. Do not allow to enter ground water, water course or sewage system.	

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13	DISPOSAL CONSIDERATIONS		
The ir availa		uctions and general notes. The list of identified uses in section 1 for specific information	
13.1	Waste treatment methods	Product The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the law on environmental protection and waste disposal legislation and the requirements of any relevant local authorities. Dispose of surplus and non-recyclable products via a licensed waste disposal. The untreated waste should not be disposed of in the sewer system unless they are not fully compliant with the requirements of each institution and legislation. Hazardous waste: YES Packaging The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. Dispose of this material and its container must be with proper precautions. Empty containers or liners may retain some product residues. Prevent drift and runoff of spilled	
13.2	European waste catalogue (EWC)	material and contact with soil, waterways, drains and sewers For disposal within the EU is roughly from the code used by the sudden refusal to register the European Waste Catalogue (EWC)	
	,		
14	TRANSPORT INFORMATION		
14.1	Land transport ADR – RID (road and rail)	Not regulated	
14.2	Transport by sea IMDG	Not regulated	
14.3	Air transport IATA	Not regulated	
14.4	Special precautions for users	Transport within user's premises: always transport in closed containers that are upright and secure means of transport. Ensure that persons involved in the service to take effective action in case of accident and / or spillage.	
14.5	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information applicable or available	
15	DECLII ATORY INFORMATIO	N N	
15	REGULATORY INFORMATIO	The list of applicable regulations is indicative and non exhaustive. Users of the product	
15.1	Reg. 1907/2006/EC (REACH)	 must examine the specific regulations and the recommendations on the correct use of the product on a case-by-case basis. Regulation (EC) N. 1907/2006 of 18 December 2006 (Registration, Evaluation, Authorisation and Restriction of Chemicals - REACH Regulation). Regulation (EC) N. 1907/2006 ANNEX XVII Conditions of restriction: none Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) N. 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) Regulation (EC) n. 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) N. 1907/2006. Directive 2012/18/UE of the European Parliament and of the Council of 4 July 2012 amending Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances. Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives Regulation (EU) 1357/2014 	
1	l		

16	OTHER INFORMATIONS			
	Full text of H statements, sections 2 and 3 (Reg. 1272/2008/EC)	None		
16.1	sections 2 and 3 (Reg.	ACGIH: American Conference of Governmental Industrial Hygienist. ADN: European Agreement concerning the international carriage of dangerous goods by by inland waterways. ADR: European Agreement concerning the international carriage of dangerous goods by road. BEI: Biological exposure limit: it indicates the relative biological agent or its metabolite established by ACGIH. EC50: Median effective concentration: the effective concentration of substance that causes in the 50% of individuals a different effect from death (immobilization, stunting etc.). LC0: The highest dose used that does not cause any death. DFG: German Commission for the study of the health hazards of chemicals in the workplace. LD50: Median dose: single dose of substance, statistically evaluated, which is expected to cause death in 50% of treated animals. PPE: Personal protective equipment IARC: International Bulk Chemical Code: International Code for Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk. ICAO: International Civil Aviation Organisation; it refers to Annex 18 of the Convention on International Civil Aviation "Safety of air transport of dangerous goods". IMDG: International Maritime Dangerous Goods code for transport of dangerous goods by sea. IMD: International Maritime Organization. Kow: Partition coefficient between n-octanol and water. It is defined as the ratio between the equilibrium concentrations of a dissolved substance in a system consisting of n-octanol and water. It is a measure of the lipophilicity of the substance. LOAEL: Lowest Observed Adverse Effect Level MAK: Maximum concentration of a chemical substance (as gas, vapor or particulate matter) in the workplace air which generally does not cause adverse effects on workers' health nor cause annoyance even when the person is repeatedly exposed during long periods (typically 8 hours per day, assuming an average of 40 hours of work per week). MARPOL: Protocol on Transport in bulk according to IMO. NOEC: No Observed Effect Concentratio		
16.2	Bibliographic references	ECDIN - Environmental Chemical Data and Information Network IUCLID - International Uniform Chemical Information Data Base ECHA C&L inventory NIOSH - Registry of Toxic Effects of Chemical Substances IFA_GESTIS - http://limitvalue.ifa.dguv.de/ HSDB TOXNET - https://toxnet.nlm.nih.gov/		
16.2	Changes to previous version	All sections were updated, according to Reg. 830/2015/EC		
16.3	Further informations	The information herein is correct at the Reg 1272/2008/EC and following amendments. Product conforms to the requirements provided in Title II of Regulation 1907/2006/EC (the registration of substances). None of the substances in this product is subject to authorization (annex 14) or is included in the candidate list of SVHCs under the REACH Regulation, the issuance of this sheet		

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16.4	Disclaimer	This MSDS complies with the requirements of Reg 830/2015/EU. It does not excuse in any was the user from knowing and applying all texts governing his activity. The user will take under it responsibility the precautions related to the use of the product. The set of regulations mentione is intended simply to help the recipient to fulfill her obligations. This list should not be considered as a technical note details. The information is based on our knowledge of the product, the daindicated. They are given in good faith. The attention of the user is directed to possible risl incurred when a product is used for other purposes than for which it was conceived. The recipie must ensure that no other obligations to compete on the basis of texts in addition to those mentioned.			
	Colours and article codes details	BLACK	01	HEAVENLY	28
		BLUE	02	VERONESE GREEN	29
		RED	03	YELLOWISH GREEN	30
		GREEN	04	LIGHT BLUE	31
		YELLOW	05	LILAC	32
		DEEP BROWN	06	OLIVE GREEN	33
		ORANGE	07	GREEN LEAF	34
		ANTIQUE PINK	08	MAGENTA	35
		TOBACCO	09	POWDER	36
		VIOLET	10	PINK	37
		LIGHT GREEN	11	PINK	38
		PINK FLESH	12	VIOLET	39
		LIGHT GREY	13	VIOLET	40
16.5		SIENNA	14	VIOLET	41
		YELLOW OCHER	15	VIOLET	42
		PRUSSIAN BLUE	16	VIOLET	43
		VERMILION	17	PINK	44
		DEEP GREY	18	PINK	45
		INDIGO	19	PINK	46
		GREEN OIL	20	PINK	47
		AMARANTH	21	GREY	48
		LIGHT BROWN	22	GREY	49
		LIGHT YELLOW	23	SILVER	50
		DEEP YELLOW	24	GREY	51
		BRILLIANT PINK	25	BLUE	52
		ENGLISH RED	26	BLUE	53
		TURQUOISE	27	BLUE	54

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	HEAVENLY	60	
	LIGHT BLUE	61	
	HEAVENLY	62	
	GREEN	63	
	GREEN	64	
	GREEN	65	
	GREEN	66	
	GREEN	67	
	GREEN	68	
	GREEN	69	
	GREEN	70	
	GREEN	71	
Colours and article codes	GREEN	72	
details	GREEN	73	
	ORANGE	74	
	ORANGE	75	
	PINK	76	
	ORANGE	77	
	ORANGE	78	
	RED	79	
	RED	80	
	RED/PINK	81	
	HEAVENLY	60	
	LIGHT BLUE	61	
	HEAVENLY	62	
	GREEN	63	
	GREEN	64	