## Safety Data Sheet MARSH<sup>®</sup> NP-Ink Black 20144



Page	: 1/10
Version	: GHS (US) ENGLISH
Version number	: 4.02
Date of issue/ Date of revision	: 1/26/2023
Date of previous issue	: 1/20/2023 (4.01)



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

### **1.1 Product identifier**

Product name	: 20144
CAS number	: Not applicable.

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

- Material uses
- : Industrial applications: Ink for use on nonporous substrates in a drop-on-demand printing process.

### 1.3 Details of the supplier of the safety data sheet

Website: www.videojet.com Email: FluidsSupport@videojet.com

Videojet Technologies Inc., 1500 Mittel Boulevard, Wood Dale, IL, 60191-1073 U.S.A Tel: 1-800-843-3610 Fax: 1-800-582-1343

### 1.4 Emergency telephone number

Medical	
Transporters	

 3E: (US) +1 866 519 4752 3E Code: 334466
 CHEMTREC: (US) +1 800 424 9300 CHEMTREC Code: CCN 23846

### **SECTION 2: Hazards identification**

### 2.1 Classification of the substance or mixture

### **GHS Classification**

1) FLAMMABLE LIQUIDS - Categor 2) EYE IRRITATION - Category 2A	y 2	Highly flammable liquid and vapor. Causes serious eye irritation.
Ingredients of unknown toxicity	: Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 0%.	
Ingredients of unknown ecotoxicity	: Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 6.3%	

## 2.2 Label elements

**GHS label elements** 





Danger. Highly flammable liquid and vapor. Causes serious eye irritation. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. If eye irritation persists: Get medical attention. Keep container tightly closed.

Other hazards which do : None known. not result in classification

# **SECTION 3: Composition/information on ingredients**

Product/ingredient name	CAS #	%	GHS Classification
1) ethanol	64-17-5	80 - <90	FLAMMABLE LIQUIDS - Category 2 EYE IRRITATION - Category 2B
2) Isopropyl alcohol	67-63-0	2 - <5	FLAMMABLE LIQUIDS - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
3) propan-1-ol	71-23-8	1 - <3	FLAMMABLE LIQUIDS - Category 2 SERIOUS EYE DAMAGE - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

SECTION 4: First aid measures	Hotline: 0978 715 636
-------------------------------	-----------------------

### 4.1 Description of first aid measures

Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

4.2 Most important sympto	oms and effects, both acute and delayed				
Potential acute health effects					
Eye contact	: Causes serious eye irritation.				
Inhalation	: No known significant effects or critical hazards.				
Skin contact	: No known significant effects or critical hazards.				
Ingestion	: No known significant effects or critical hazards.				
Over-exposure signs/sym	Over-exposure signs/symptoms				
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness				
Inhalation	: No specific data.				
Skin contact	: No specific data.				
Ingestion	: No specific data.				

## 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.



#### SECTION 5: Firefighting measures 5.1 Extinguishing media Suitable extinguishing : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam. media Unsuitable extinguishing : Do not use water jet. media 5.2 Special hazards arising from the substance or mixture Hazards from the : Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion substance or mixture hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. **Hazardous thermal** : Decomposition products may include the following materials: carbon dioxide decomposition products carbon monoxide metal oxide/oxides 5.3 Advice for firefighters **Special protective actions** : Promptly isolate the scene by removing all persons from the vicinity of the incident if for fire-fighters there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. **Special protective** 2 Fire-fighters should wear appropriate protective equipment and self-contained equipment for fire-fighters breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## **SECTION 6: Accidental release measures**

### 6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### 6.2 Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### 6.3 Methods and materials for containment and cleaning up

Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

### 6.4 Reference to other sections

See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

### **SECTION 7: Handling and storage**

### 7.1 Precautions for safe handling

Protective measures	: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### **SECTION 8: Exposure controls/personal protection**

### 8.1 Control parameters

### **Occupational exposure limits**

Product/ingredient name	Exposure limit values
ethanol	OSHA PEL 1989 (United States, 3/1989).           TWA: 1000 ppm 8 hours.           TWA: 1900 mg/m³ 8 hours.           OSHA PEL (United States, 5/2018).           TWA: 1000 ppm 8 hours.           TWA: 1000 ppm 8 hours.           TWA: 1900 mg/m³ 8 hours.
Isopropyl alcohol	OSHA PEL 1989 (United States, 3/1989). TWA: 400 ppm 8 hours. TWA: 980 mg/m <sup>3</sup> 8 hours. STEL: 500 ppm 15 minutes. STEL: 1225 mg/m <sup>3</sup> 15 minutes. OSHA PEL (United States, 5/2018). TWA: 400 ppm 8 hours. TWA: 980 mg/m <sup>3</sup> 8 hours.
propan-1-ol	OSHA PEL 1989 (United States, 3/1989). TWA: 200 ppm 8 hours. TWA: 500 mg/m <sup>3</sup> 8 hours. STEL: 250 ppm 15 minutes. STEL: 625 mg/m <sup>3</sup> 15 minutes. OSHA PEL (United States, 5/2018). TWA: 200 ppm 8 hours. TWA: 500 mg/m <sup>3</sup> 8 hours.

### **Biological exposure indices**

Product/ingredient name	Exposure indices
Isopropyl alcohol	ACGIH BEI (United States, 1/2022) BEI: 40 mg/l, acetone [in urine]. Sampling time: end of shift at end of workweek.

Recommended monitoring procedures	:	Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure controls Appropriate engineering controls	:	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Hygiene measures	:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	:	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Hand protection	:	Recommended: EN374 A May be used (Short term exposure): Latex gloves. Nitrile gloves. Use gloves only once. Gloves should be replaced regularly and if there is any sign of damage to the glove material. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.
Respiratory protection	:	Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: organic vapor filter (Type A) Additional information: In situations where misting or flying may occur, use appropriate certified respirators. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure controls	:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

# **SECTION 9: Physical and chemical properties**

### 9.1 Information on basic physical and chemical properties

Appearance	
Physical state	: Liquid.
Color	: Black.
Odor	: Not available.
Odor threshold	: Estimated.: ≥ 11 ppm (propan-1-ol).
рН	: Not applicable.
Melting point/freezing point	: Estimated.: ≤ -90 °C (Isopropyl alcohol).
Initial boiling point and boiling range	: Estimated.: ≥ 78 °C (ethanol).
Flash point	: 12 °C [ASTM D 56]
Evaporation rate (butyl acetate = 1)	: Estimated.: ≤ 1.7 [butyl acetate = 1] (ethanol).
Flammability (solid, gas) Upper/lower flammability or explosive limits	<ul> <li>Not applicable. (Liquid)</li> <li>Estimated.: ≥ 2 % (Isopropyl alcohol). Estimated.: ≤ 19 % (ethanol).</li> </ul>

201	44
-----	----

Vapor pressure Vapor density Relative density (Water = 1) Solubility(ies)	:	Estimated.: ≤ 6 kPa (43 mm Hg) at 20°C (ethanol). Estimated.: ≥ 1.6 [Air = 1] (ethanol). 0.805 [OECD 109] Not available.
Partition coefficient: n- octanol/water	:	Not applicable.
Auto-ignition temperature	:	Estimated.: ≥ 400 °C [DIN 51794] (propan-1-ol).
Decomposition temperature	:	Thermally stable.
Viscosity	:	Not available.
Explosive properties	1	Not applicable. Not classified.
Oxidizing properties	1	Not applicable. Not classified.
Particle characteristics		
Median particle size	:	Not applicable.
9.2 Other information		
Volatility (w/w)		.93 %.
VOC Volatility (w/w)		.93 %.

### **SECTION 10: Stability and reactivity**

### **10.1 Reactivity**

No specific test data related to reactivity available for this product or its ingredients.

### 10.2 Chemical stability

The product is stable.

### 10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

### 10.4 Conditions to avoid

Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

### **10.5 Incompatible materials**

Reactive or incompatible with the following materials: oxidizing materials

### **10.6 Hazardous decomposition products**

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## **SECTION 11: Toxicological information**

### 11.1 Information on toxicological effects

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
ethanol	LC50 Inhalation Vapor	Rat	>117 mg/l	4 hours
	LD50 Dermal	Rabbit	>15800 mg/kg	-
	LD50 Oral	Rat	10470 mg/kg	-
Isopropyl alcohol	LCLo Inhalation Vapor	Rat	>24.6 mg/l	6 hours
	LD50 Dermal	Rabbit	12.9 g/kg	-
	LD50 Oral	Rat	5.84 g/kg	-
propan-1-ol	LCLo Inhalation Vapor	Rat	51.91 mg/l	8 hours
	LD50 Dermal	Rabbit	4032 mg/kg	-
	LD50 Oral	Rat	5400 mg/kg	-

Conclusion/Summary : No

: Not classified. No known significant effects or critical hazards.

### Acute toxicity estimates

Route	ATE value
Dermal	96235.58 mg/kg

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
ethanol	Eyes - Irritant Skin - Primary dermal irritation index (PDII)	Rabbit Rabbit	- 0	- 4 hours	21 days 14 days

### **Conclusion/Summary**

: Not classified.	No known significant effects or critical hazards.
-------------------	---

: Causes serious eye irritation.

Respiratory

Skin Eyes

: Not classified. No known significant effects or critical hazards.

Sensitization

Product/ingredient name	Route of exposure	Species	Result
ethanol	Respiratory	Rat	Not sensitizing
	skin	Mouse	Not sensitizing

### **Conclusion/Summary**

-			
C	l/ i	n	
0	NI		

: Not classified. No known significant effects or critical hazards.

Respiratory

: Not classified. No known significant effects or critical hazards.

### **Mutagenicity**

Product/ingredient name	Test	Experiment	Result
ethanol	OECD 474	Experiment: In vivo Subject: Mammalian-Animal	Negative
	OECD 474	Experiment: In vivo Subject: Mammalian-Animal	Negative
Conclusion/Summary : No	t classified. No known signific	ant effects or critical hazards.	

### **Carcinogenicity**

**Conclusion/Summary** : Not classified. No known significant effects or critical hazards.

### **Reproductive toxicity**

**Conclusion/Summary** : Not classified. No known significant effects or critical hazards.

### Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Isopropyl alcohol	Category 3	-	Narcotic effects
propan-1-ol	Category 3		Narcotic effects

### Specific target organ toxicity (repeated exposure)

Not classified. No known significant effects or critical hazards.

### Aspiration hazard

**Conclusion/Summary** : Not classified. No known significant effects or critical hazards.

### Potential chronic health effects, Other

Product/ingredient name	ame Result		Dose	Exposure
ethanol	Sub-chronic NOAEL Oral	Rat	1730 mg/kg	90 days

**Conclusion/Summary** : No known significant effects or critical hazards.

## **SECTION 12: Ecological information**

12.1 Toxicity

### GHS (US) ENGLISH Version: 4.02 Page: 8/10

Product/ingredient name	Result	Species	Exposure
ethanol	Acute EC50 275 mg/l Fresh water	Algae - Chlorella vulgaris	72 hours
	Acute LC50 5012 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	48 hours
	Acute LC50 11200 mg/l Fresh water	Fish - oncorhynchus mykiss	24 hours
	Chronic EC10 11.5 mg/l Fresh water	Algae - Chlorella vulgaris	72 hours
	Chronic NOEC 79 mg/l Marine water	Crustaceans - Palaemonetes pugio	12 days
	Chronic NOEC 9.6 mg/l	Daphnia - daphnia magna	10 days
	Chronic NOEC 250 mg/l Fresh water	Fish - Danio rerio - Embryo	120 hours
Isopropyl alcohol	Acute EC50 >1800 mg/l Fresh water	Algae - Scenedesmus quadricauda	7 days
	Acute LC50 9640000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic LOAEL 1800 mg/l Fresh water	Algae - Scenedesmus quadricauda	7 days
propan-1-ol	Acute EC50 9170 mg/l Fresh water	Algae - Pseudokirchnerella subcapitata	48 hours
	Acute LC50 4480000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 1150 mg/l Fresh water	Algae - Chlorella pyrenoidosa	48 hours
	Chronic NOEC >100 mg/l Fresh water	Daphnia - Daphnia magna	21 days

# 12.2 Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
ethanol Isopropyl alcohol propan-1-ol	-	-	Readily Readily Readily

**Conclusion/Summary** : Not available.

### 12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
ethanol	-0.35	-	low
Isopropyl alcohol	0.05		low
propan-1-ol	0.2		low

### 12.4 Mobility in soil

Soil/water partition	: Not available.
coefficient (Koc)	
Mobility	: Not available.

### 12.5 Results of PBT and vPvB assessment

Product/ingredient name	PBT	Р	В	Т	vPvB	vP	vB
ethanol propan-2-ol propan-1-ol octamethylcyclotetrasiloxane	No No SVHC (Recommended)	N/A N/A N/A Specified	N/A N/A N/A Specified	No No No Specified	N/A N/A N/A SVHC (Recommended)	N/A N/A Specified	N/A N/A N/A Specified

### 12.6 Other adverse effects

No known significant effects or critical hazards.

## **SECTION 13: Disposal considerations**

13.1 Waste treatment methods	
Product	
Methods of disposal :	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 requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Packaging	
Methods of disposal :	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.

### Special precautions : None.

# **SECTION 14: Transport information**

	UN	IMDG	IATA	US DOT
14.1 UN number	UN1210	UN1210	UN1210	UN1210
14.2 UN proper shipping name	Printing Ink	Printing Ink	Printing Ink	Printing Ink
14.3 Transport hazard class(es)	3	3	3	3
14.4 Packing group	<b>I</b> I		"	<b>_</b>
14.5 Environmental hazards	No.	No.	No.	No.
Additional information	-	-	-	-

### 14.6 Special precautions for user

No special measures required.

### 14.7 Transport in bulk according to IMO instruments

Not available.

Not listed

SECTION 15: Regula	ECTION 15: Regulatory information				
CERCLA: Hazardous substances.	: The following components are listed: None.				
SARA 313	The following components are listed: C.I. Solvent Black 48 (1 - <3%)				
California Prop. 65	The following components are listed: None.				
National Fire Protection Association (U.S.A.)	Flammability Health Reactivity special hazard				
Tariff Code - harmonized system	: 3215.11 Printing ink: Black. USA90.60 EU90.90				
Heavy Metals	: Total concentration: Pb, Hg, Cd, Cr(VI) < 100 ppm				
California, VOC Content	: 748 grams volatile organic / liter less water or exempt volatile.				
Chemical Weapons Convention Schedule I Chemicals	onvention List Chemical Weapons Convention List Schedule II Chemicals Chemical Weapons Convention List				

# **SECTION 16: Other information**

<b>Revision comments</b>	: 🔽 Indicates information that has changed from previously issued version.
Abbreviations and acronyms	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

Not listed

Not listed

UN = United Nations

#### Procedure used to derive the classification

Classification	Justification
	On basis of test data Calculation method

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.