# SAFETY DATA SHEET

Videojet<sup>®</sup> Ink V458-D



Page	: 1/11
Page Version	: AU ENGLISH
Version number	: 4.02
Date of issue/ Date of revision	: 12/6/2023
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	:	V458-D
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 in a continuous ink jet 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

Aldus Pty Ltd, 1 Rhodes St, West Ryde, NSW 2114, Australia Tel: +61 1300 018 330 Email: sales@tronics.com.au

Aldus - Tronics (NZ) Ltd, Unit 3, 23-25 Highbrook Dr, East Tamaki, Auckland, New Zealand Tel: +64 9 588 4072 Email: sales@tronics.co.nz

1.4 Emergency telephone	number
Medical	SE (AU): +61 1800 686 951 / +61 02 8036 3166 3E Code: 334466
Transporters	SE (AU): +61 1800 686 951 / +61 02 8036 3166 3E Code: 334466

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

#### 2.1 Classification of the substance or mixture **Product definition** : Mixture Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS] 1) Highly flammable liquid and vapour. 2) Causes skin irritation. 3) Causes serious eye damage. May cause drowsiness or dizziness. 4) Ingredients of unknown : Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 0%. toxicity Ingredients of unknown : Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 16.3% ecotoxicity

#### 2.2 Label elements



Danger. Highly flammable liquid and vapour. Causes serious eye damage. Causes skin irritation. May cause drowsiness or dizziness. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

Hazardous ingredients	:	butanone (CAS 78-93-3, EC 201-159-0); cyclohexanone (CAS 108-94-1, EC 203-631-1).
Supplemental label elements	:	Not applicable.
2.3 Other hazards		
Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	:	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Other hazards which do not result in classification	:	None known.
Additional guidance	:	Avoid breathing vapour. Wear protective gloves. IF INHALED: Call a POISON CENTER or physician if you feel unwell. Keep container tightly closed. Store in a well-ventilated place.

## SECTION 3: Composition/information on ingredients

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#### Substance/mixture

Product/ingredient name	Identifiers	%	Classification	Туре
butanone cyclohexanone	78-93-3 108-94-1	60 - <70 8 - <13	FLAMMABLE LIQUIDS - Category 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Narcotic effects) - Category 3 FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 FLAMMABLE LIQUIDS - Category 2 SERIOUS EYE DAMAGE/EYE IRRITATION - CATEGORY 2	[1] [2]
ethanol	64-17-5	2 - <5		[1] [2]

Type

[1] Substance classified with a health or environmental hazard [2] Substance with a workplace exposure limit

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section. Occupational exposure limits, if available, are listed in Section 8.

See Section 16 for the full text of the H statements declared above

## **SECTION 4: First aid measures**

### 4.1 Description of first aid measures

#### Eye contact

: Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.

Inhalation	: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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. 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	: Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. 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.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

### 4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects	
Eye contact :	Causes serious eye damage.
Inhalation :	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Skin contact :	Causes skin irritation.
Ingestion	Can cause central nervous system (CNS) depression.
Over-exposure signs/sympton	<u>ns</u>
Eye contact :	Adverse symptoms may include the following: pain watering redness
Inhalation :	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact :	Adverse symptoms may include the following: pain or irritation redness blistering may occur
Ingestion	Adverse symptoms may include the following: stomach pains

**4.3 Indication of any immediate medical attention and special treatment needed** Treat symptomatically.

## **SECTION 5: Firefighting measures**

5.1 Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
5.2 Special hazards arising fr	om the substance or mixture
Hazards from the substance or mixture	: Highly flammable liquid and vapour. Runoff to sewer may create fire or explosion 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 combustion products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide
5.3 Advice for firefighters	
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if 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 equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
<b>SECTION 6: Acciden</b>	tal release measures
6.1 Personal precautions, pro	tective 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 spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: If specialised 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 spilt 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 material 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 the 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 spilt 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 get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. 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. Store locked up. Eliminate all ignition sources. Separate from oxidising 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 unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product.

#### 8.1 Control parameters

#### **Occupational exposure limits**

Product/ingredient name	Exposure limit values
potanone	Safe Work Australia (Australia, 10/2022). STEL: 890 mg/m <sup>3</sup> 15 minutes. STEL: 300 ppm 15 minutes.
	TWA: 445 mg/m <sup>3</sup> 8 hours. TWA: 150 ppm 8 hours.
cyclohexanone	Safe Work Australia (Australia, 10/2022). Absorbed through skin. TWA: 100 mg/m <sup>3</sup> 8 hours. TWA: 25 ppm 8 hours.
ethanol	Safe Work Australia (Australia, 10/2022). TWA: 1880 mg/m <sup>3</sup> 8 hours. TWA: 1000 ppm 8 hours.

#### **Biological exposure indices**

No exposure indices known.

## procedures

**Recommended monitoring** : 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, vapour 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 B, 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	<ul> <li>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.</li> <li>Recommended: organic vapour filter (Type A)</li> <li>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.</li> </ul>
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 phys	ical and chemical properties
Appearance	
Physical state	: Liquid.
Colour	: Red.
Odour	: Not available.
Odour threshold	: Estimated.: ≥ 4 ppm (cyclohexanone).
рН	: Not applicable.
Melting point/freezing point	: Estimated.: ≤ -31 °C (cyclohexanone).
Initial boiling point and boiling range	: Estimated.: ≥ 78 °C (ethanol).
Flash point	: -9 °C [ASTM D 56]
Evaporation rate	: Estimated.: ≤ 7 [butyl acetate = 1] (butanone).
Flammability (solid, gas)	: Not applicable. ( Liquid )
Upper/lower flammability or explosive limits	: Estimated.: ≥ 2 % (butanone). Estimated.: ≤ 19 % (ethanol).
Vapour pressure	: Estimated.: ≤ 11 kPa (79 mm Hg) at 20°C (butanone).
Vapour density	: Estimated.: $\geq$ 1.6 [Air = 1] (ethanol).
Relative density	: 0.866 [OECD 109]
Solubility(ies)	: Not available.

Partition coefficient: n- octanol/water	: Not applicable.
Auto-ignition temperature	: Estimated.: ≥ 404 °C (butanone).
Decomposition temperature	: Thermally stable.
Viscosity	: Not available.
Explosive properties	: Not applicable. Not classified.
Oxidising properties	: Not applicable. Not classified.
Particle characteristics	
Median particle size	: Not applicable.
9.2 Other information	
Volatility (w/w)	: 82 %.
VOC Volatility (w/w)	: 82 %.

## **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 pressurise, 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: oxidising 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
butanone	LC50 Inhalation Vapour	Rat	23.5 mg/l	8 hours
	LD50 Dermal	Rabbit - Male	>8000 mg/kg	-
	LD50 Oral	Rat	3460 mg/kg	-
cyclohexanone	LC50 Inhalation Vapour	Rat	8000 ppm	4 hours
	LD50 Dermal	Rabbit	794 to 3160 mg/kg	-
	LD50 Oral	Rat	1890 mg/kg	-
ethanol	LC50 Inhalation Vapour	Rat	>117 mg/l	4 hours
	LD50 Dermal	Rabbit	>15800 mg/kg	-
	LD50 Oral	Rat	10470 mg/kg	-

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

#### Acute toxicity estimates

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Narcotic effects

Route	ATE value
	18193.09 mg/kg 19030.55 mg/kg 88.63 mg/l

#### 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**

: Causes skin irritation.

Eyes

Skin

- : Causes serious eye damage.
- Respiratory
- : Not classified. No known significant effects or critical hazards.

#### **Sensitisation**

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

#### **Conclusion/Summary**

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	•	

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

### **Mutagenicity**

Respiratory

Product/ingredient name	Test		Experiment	Result
ethanol	OECD 474	Experiment:		Negative
	OECD 474	Experiment	mmalian-Animal : In vivo mmalian-Animal	Negative
Conclusion/Summary : No	t classified. No know	n significant effects	or critical hazards.	
Carcinogenicity				
Conclusion/Summary : No	t classified. No know	n significant effects	or critical hazards.	
Reproductive toxicity				
Conclusion/Summary : No	t classified. No know	n significant effects	or critical hazards.	
Specific target organ toxicity (sing	<u>le exposure)</u>			
Product/ingredient name	Category	Route of exposure	Target org	ans

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## Specific target organ toxicity (repeated exposure)

Not available.

butanone

#### Aspiration hazard

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

#### Potential chronic health effects, Other

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

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

Category 3

**Biodegradability** 

Readily

## **SECTION 12: Ecological information**

#### **12.1 Toxicity**

Product/ingredient name	Result	Species	Exposure
putanone	Acute EC50 2029 mg/l Fresh water	Algae - Pseudokirchnerella	96 hours
		subcapitata	
	Acute EC50 308 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 2993 mg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 1240 mg/l Fresh water	Algae - Pseudokirchnerella	96 hours
	-	subcapitata	
cyclohexanone	Acute LC50 527000 µg/l Fresh water	Fish - Fathead minnow -	96 hours
		Pimephales promelas	
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	12 days
	-	pugio	-
	Chronic NOEC 9.6 mg/l	Daphnia - <i>daphnia magna</i>	10 days
	Chronic NOEC 250 mg/l Fresh water	Fish - Danio rerio - Embryo	120 hours

**Conclusion/Summary** 

12.2 Persistence and degradability

#### Aquatic half-life **Photolysis** Product/ingredient name butanone Readily Readily cyclohexanone

**Conclusion/Summary** : Not available.

#### 12.3 Bioaccumulative potential

ethanol

Product/ingredient name	LogPow	BCF	Potential
butanone	0.3	-	Low
cyclohexanone	0.86	-	Low
ethanol	-0.35	-	Low

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

#### 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

#### 12.6 Other adverse effects

No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

#### 13.1 Waste treatment methods

**Product** 

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Methods of disposal	: The generation of waste should be avoided or minimised 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 spilt material and runoff and contact with soil, waterways, drains and sewers.
Packaging	
Methods of disposal	: The generation of waste should be avoided or minimised 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**

	ADR/RID	ADN	IMDG	ΙΑΤΑ
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	11	11	II	11
14.5 Environmental hazards	No.	No.	No.	No.
Additional information	Special provisions 640 (C) Tunnel code (D/E)	Special provisions 640 (C)	-	-

#### 14.6 Special precautions for user

No special measures required.

#### 14.7 Transport in bulk according to IMO instruments

Not available.

## **SECTION 15: Regulatory information**

Tariff Code - harmonized system	: 3215.19 Printing ink: Other. USA90.60 EU10
Heavy Metals	: Total concentration: Pb, Hg, Cd, Cr(VI) < 100 ppm

. 10	-р, пу, са, с	SI(VI) > 100	ррп

Chemical Weapons Convention List Schedule I Chemicals	Chemical Weapons Convention List Schedule II Chemicals	Chemical Weapons Convention List Schedule III Chemicals	
Not listed	Not listed	Not listed	

# **SECTION 16: Other information**

<b>Revision comments</b>	: $ ho$ Indicates information that has changed from previously issued version.	
Abbreviations and acronyms	<ul> <li>ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement PBT = Persistent, Bioaccumulative and Toxic</li> </ul>	

PNEC = Predicted No Effect Concentration RRN = REACH Registration Number vPvB = Very Persistent and Very Bioaccumulative

#### Procedure used to derive the classification

Classification	Justification
	On basis of test data Calculation method Calculation method 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.