

Issue 2020.11.24

Revision 2025.11.13

## Safety Data Sheet (SDS)

### Section 1 – CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier	Ink-4144K
Product Code	4144K
Reference Number	60
Name of Supplier	Hitachi Industrial Equipment Systems Co.,Ltd.
Address	1-1 Higashitaga-cho 1-chome,Hitachi-shi, Ibaraki-ken, 316-8502 Japan
Department in Charge	Ink Group, Marking Systems and Hoist Systems Division
Phone Number	+81-294-36-8682
Fax Number	+81-294-36-8975
Mail Address	aida-kohhei@hitachi-ies.co.jp
Emergency Phone Number	+81-294-36-8682
Recommended Use	Industrial ink jet printers
Restriction on Use	If the product is to be used for applications other than those recommended, seek the judgment of an expert/chemical substance specialist, etc.

### Section 2 – HAZARDS IDENTIFICATION

#### GHS Classification of the Chemical

Physicochemical	Flammable liquids Category 2
Health Hazards	Acute toxicity (Inhalation: vapour) Category 4 Acute toxicity (Inhalation: dust and mist) Category 4
	Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2B Reproductive toxicity Category 2 Specific target organ toxicity (single exposure) Category 2 (systemic toxicity, central nervous system)
	Specific target organ toxicity (single exposure) Category 3 (narcotic effects, respiratory tract irritation)
	Specific target organ toxicity (repeated exposure) Category 2 (spleen, liver, blood system, respiratory organs, optic organs, central nervous system, auditory organs)
	Other hazards than mentioned above are Not classified or Classification not possible.

#### GHS Label Elements

##### Pictograms



Signal Word	Danger
Hazard Statements	H225 Highly flammable liquid and vapour H315+H320 Causes skin and eye irritation H332 Harmful if inhaled H335 May cause respiratory irritation H336 May cause drowsiness or dizziness H361 Suspected of damaging fertility or the unborn child
	H371 May cause damage to systemic toxicity, central nervous system

H373 May cause damage to spleen, liver, blood system, respiratory organs, optic organs, central nervous system, auditory organs through prolonged or repeated exposure

#### Precautionary Statements

##### Prevention

Obtain special instructions before use.(P201)  
 Do not handle until all safety precautions have been read and understood.(P202)  
 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.(P210)  
 Keep container tightly closed.(P233)  
 Ground and bond container and receiving equipment.(P240)  
 Use explosion-proof electrical, ventilating and lighting equipment.(P241)  
 Use non-sparking tools.(P242)  
 Take action to prevent static discharges.(P243)  
 Do not breathe dust/fume/gas/mist/vapours/spray.(P260)  
 Avoid breathing dust/fume/gas/mist/vapours/spray.(P261)  
 Wash hands thoroughly after handling.(P264)  
 Wash eyes thoroughly after handling.(P264)  
 Do not eat, drink or smoke when using this product.(P270)  
 Use only outdoors or in a well-ventilated area.(P271)

##### Response

Wear protective gloves/protective clothing/eye protection/face protection.(P280)  
 IF ON SKIN: Wash with plenty of soap and water.(P302+P352)  
 IF ON SKIN or hair: Take off immediately all contaminated clothing. Rinse skin with water or shower.(P303+P361+P353)  
 IF INHALED: Remove person to fresh air and keep comfortable for breathing.(P304+P340)  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.(P305+P351+P338)  
 IF exposed or concerned: Call a doctor.(P308+P311)  
 IF exposed or concerned: Get medical advice/attention.(P308+P313)  
 Call a doctor if you feel unwell.(P312)  
 Get medical advice and attention if you feel unwell.(P314)  
 Specific treatment.(P321)  
 If skin irritation occurs: Get medical advice/attention.(P332+P313)  
 If eye irritation persists: Get medical advice/attention.(P337+P313)  
 Take off contaminated clothing and wash it before reuse.(P362+P364)  
 In case of fire: Use appropriate media to extinguish.(P370+P378)  
 Store in a well-ventilated place. Keep container tightly closed.(P403+P233)  
 Store in a well-ventilated place. Keep cool.(P403+P235)  
 Store locked up.(P405)

##### Storage

Disposal Dispose of contents and container in accordance with local, regional and national regulations (to be specified).(P501)

## Section 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Distinction of Substance or Mixture Mixture

Chemical Name or Generic Name	Concentration or Its Ranges (wt%)	Formula	ENCS No./ISHL No.		CAS RN
			ENCS No.	ISHL No.	
Chromium and its compounds	3-5	-	Existing (Trade secret)	Existing (Trade secret)	Trade secret
Nitrocellulose	3-5	-	(8)-176	Existing	9004-70-0
Isopropyl alcohol	1-3	CH <sub>3</sub> CH(OH)CH <sub>3</sub>	(2)-207	Existing	67-63-0
Methyl isopropyl ketone	75-less than 85	CH <sub>3</sub> CH(CH <sub>3</sub> )COCH <sub>3</sub>	(2)-542	Existing	563-80-4

## Section 4 – FIRST AID MEASURES

Inhalation

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

Skin Contact

IF exposed or concerned: Call a doctor.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation occurs: Get medical advice and attention.

Specific treatment.

IF exposed or concerned: Call a doctor.

Eye Contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

Ingestion

IF exposed or concerned: Call a doctor.

Rinse mouth.

IF SWALLOWED: Call a doctor if you feel unwell.

IF exposed or concerned: Call a doctor.

## Section 5 – FIRE FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing agent suitable for type of surrounding fire.

When dust occurs, use dry sand.

Unsuitable Extinguishing Media

Cylindric water.

Specific Hazards in Case of Fire

Risk of producing harmful gases such as carbon monoxide. Avoid inhalation of smoke or gases.

Specific Fire Fighting

Fight fire from upwind position if possible  
Keep away from sources of ignition and use appropriate extinguishing media.

Prohibit unauthorized staff from entering the area around the fire.

Keep unnecessary people away.

Special Protective Equipment and Precautions for Fire Fighters

Use goggles in combination with dust mask, and another protections as appropriate to situation.

## Section 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Use goggles in combination with dust mask, and another protections as appropriate to situation.

Large spills :Evacuate area.

Environmental Precautions  
 Methods and Equipment for Containment and Cleaning Up  
 Prevention Measures for Secondary Accidents

Ensure adequate ventilation.  
 Do not discharge into the drains, surface waters or ground water directly.  
 small spill : absorb with material such as non-combustible material wash thoroughly after handling  
 Large spills: Dike spills and dispose of in safe area.  
 Keep away from sources of ignition and prepare extinguishing media.  
 Risk of slipping. Spilled material forms slippery floor.  
 Do not recklessly walk on the spillage.

Section 7 – HANDLING AND STORAGE

Handling	Technical Measures	Provide ventilation system and use necessary personal protective equipment as described in "Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION".  Ground/bond container and receiving equipment. Use only non-sparking tools. Use explosion-proof electrical/ventilating/lighting.  Take precautionary measures against static discharge.  Use local exhaust ventilation in case of production of fume or mist. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
	Precautions for Safe Handling	Keep cool.  Do not breathe dust/fume/gas/mist/vapours/spray.  Do not eat, drink or smoke when using this product.  Wash hands thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Refer to "Section 10 – STABILITY AND REACTIVITY".
Storage	Prevents Handling of Incompatible Substances or Mixtures  Conditions for Safe Storage	Refer to "Section 10 – STABILITY AND REACTIVITY".  Store locked up. Store container tightly closed in well-ventilated place.

Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

	Japan Administration Level	Exposure Limits (Japan Society for Occupational Health)	TLVs (ACGIH)
Chromium and its compounds	Not listed	0.5mg/m3 as Cr3+	Not listed
Nitrocellulose	Not listed	Not listed	Not listed
Isopropyl alcohol	200ppm	[ Maximum allowable concentration ] 400ppm (980mg/m3)	TWA 200 ppm, STEL 400 ppm
Methyl isopropyl ketone	Not listed	Not listed	TWA 20 ppm, STEL –

  

	Concentration standards specified by the Minister of Health, Labour and Welfare	
	Concentration standard value for 8-hours exposure	Concentration standard value for short-term exposure/ceiling

As far as we know, the information that is listed here is accurate. However, the above-mentioned suppliers or their subsidiaries shall not be liable for the accuracy or completeness of the information described above.

Chromium and its compounds	Not listed	Not listed
Nitrocellulose	Not listed	Not listed
Isopropyl alcohol	Not listed	Not listed
Methyl isopropyl ketone	Not listed	Not listed

TLVs (ACGIH) can be referenced at: <https://www.acgih.org/>

Engineering Controls		Use local exhaust ventilation in case of production of fume or mist. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
Personal Protective Equipment	Respiratory Protection	Use explosion-proof electrical equipment and prevent from static electricity. Select and wear appropriate respiratory protective equipment based on risk assessments and other measures.
	Hand Protection	Select and wear appropriate safety gloves based on risk assessments and other measures.
	Eye/Face Protection	Select and wear appropriate face and eye protection based on risk assessments and other measures.
	Skin and Body Protection	Select and wear appropriate protective clothing and footwear based on risk assessments and other measures.

#### Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State		Liquid
Form		Liquid
Colour		Black
Odour		Solvent odor
Melting Point/Freezing Point		-95°C (as Methyl isopropyl ketone)
Boiling Point or Initial Boiling Point and Boiling Ranges		94°C (as Methyl isopropyl ketone)
Flammability		Flammability
Lower and Upper Explosion Limit / Flammability Limit	Lower Limit	1.2vol% (as Methyl isopropyl ketone)
	Upper Limit	8vol% (as Methyl isopropyl ketone)
Flash Point		0°C (Tag Closed Cup)
Auto-Ignition Temperature		475°C(as Methyl isopropyl ketone)
Decomposition Temperature		No data available
pH		No data available
Kinematic Viscosity		3.5mm <sup>2</sup> /s
Solubility		water: 6g/L(as Methyl isopropyl ketone)
Partition Coefficient : n-Octanol/Water		0.84 (as Methyl isopropyl ketone)
Vapour Pressure		5.5kPa (20°C) (as Methyl isopropyl ketone)
Density and/or Relative Density		0.85
Relative Gas Density		No data available
Particle Characteristics		No data available

#### Section 10 – STABILITY AND REACTIVITY

Reactivity	Does not react dangerously under normal conditions.
Chemical Stability	Stable under normal conditions of use.

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Possibility of Hazardous Reaction	Flammable
Conditions to Avoid	There is a risk of explosion due to impacts, friction, flame and other source of ignition.
Incompatible Substances or Mixtures	No data available
Hazardous Decomposition Products	No data available
Other Data	No data available

## Section 11 – TOXICOLOGICAL INFORMATION

Acute Toxicity	Oral	Classified as Not classified since ATE is over more than 2000(mg/kg).
	Dermal	Classified as Not classified since ATE is over more than 2000(mg/kg).
	Inhalation	(gas) Does not fall under gas based on GHS definitions.  (vapour) Classified as Category 4 since ATE is 2500 to (dust and mist) Classified as Category 4 since ATE is 1.5mg/l.
Skin Corrosion/Irritation		Classified as Category 2 since the sum of Category 2 ingredients is more than 10%.
Serious Eye Damage/Eye Irritation		Classified as Category 2B since the sum of Eye Category 2B ingredients is more than 10%.
Respiratory Sensitization		Classified as Not classified since ingredients that has a hazard category are contained less than the concentration limit.
Skin Sensitization		Classified as Not classified since ingredients that has a hazard category are contained less than the concentration limit.
Germ Cell Mutagenicity		Classified as Not classified since ingredients that has a hazard category are contained less than the concentration limit.
Carcinogenicity		Classified as Not classified since ingredients that has a hazard category are contained less than the concentration limit.
Reproductive Toxicity		(Reproductive toxicity) Classified as Category 2 since one of the Category 2 ingredients is more than 3.0%. (Reproductive toxicity, effects on or via lactation)
		Classified as Not classified since ingredients that has a hazard category are contained less than the concentration limit.
		Classified as Category 2(systemic toxicity) since one of the Category 2(systemic toxicity) ingredients is more than 10%.
Specific Target Organ Toxicity (Single Exposure)		Classified as Category 2(central nervous system) since one of the Category 2(central nervous system) ingredients is more than 10%.
		Classified as Category 3(narcotic effects) since the sum of Category 3(narcotic effects) ingredients is more than 20%.
		Classified as Category 3(respiratory tract irritation) since the sum of Category 3(respiratory tract irritation) ingredients is more than 20%.
		Classified as Category 2(spleen) since one of the Category 2(spleen) ingredients is more than 10%.
Specific Target Organ Toxicity (Repeated Exposure)		Classified as Category 2(liver) since one of the Category 2(liver) ingredients is more than 10%.

As far as we know, the information that is listed here is accurate. However, the above-mentioned suppliers or their subsidiaries shall not be liable for the accuracy or completeness of the information described above.

Classified as Category 2(blood system) since one of the Category 2(blood system) ingredients is more than 10%.

Classified as Category 2(respiratory organs) since one of the Category 2(respiratory organs) ingredients is more than 10%.

Classified as Category 2(optic organs) since one of the Category 2(optic organs) ingredients is more than 10%.

Classified as Category 2(central nervous system) since one of the Category 2(central nervous system) ingredients is more than 10%.

Classified as Category 2(auditory organs) since one of the Category 2(auditory organs) ingredients is more than 10%.

#### Aspiration Hazard

Unable to classify due to insufficient data.

### Section 12 – ECOLOGICAL INFORMATION

Hazardous to the Aquatic Environment, Short-Term (Acute)

Classification not possible since lots of the concentrations of unknown ingredients.

Hazardous to the Aquatic Environment, Long-Term (Chronic)

Classification not possible since lots of the concentrations of unknown ingredients.

Ecotoxicity

No data available

Persistence

No data available

Bioaccumulative Potential

No data available

Mobility in Soil

No data available

Hazardous to the Ozone Layer

Unable to classify due to insufficient data.

### Section 13 – DISPOSAL CONSIDERATIONS

Residual waste

Because waste materials such as liquid waste, paper towels used to wipe it up, or empty containers are flammable combustible materials, the section on "specially controlled industrial waste(Flammable waste oil)" from the Waste Management and Public Cleaning Law (Waste Management Law) is applicable.

Either appropriately process in accordance with Waste Management and Public Cleaning Law, or commission a contractor licensed for transport or disposal of industrial waste requiring special management.

Do not let wastewater, etc. used for cleaning machinery or containers flow directly onto the ground or in to the culverts.

For waste materials generated by wastewater treatment, incineration, etc. either carry out processing in accordance with the Waste Management and Public Cleaning Law and related laws and regulations, or commission a licensed vendor to do so.

When incinerating of waste materials, etc., do not use an incinerator without cleaning equipment, as harmful gas will be generated.

Clarify the contents of waste materials and entrust disposal to a waste disposal company.

Contaminated containers and packaging

Empty containers should be treated as industrial wastes and not allowed to contain waste.

### Section 14 – TRANSPORT INFORMATION

International Regulations

Regulatory Information Conform to the provisions of IMO.  
by Sea

UN No. 1210

Proper Shipping Name PRINTING INK RELATED MATERIAL

Class 3

	Packing Group	II
	Marine Pollutant	Not applicable
	Liquid Substance	Not applicable
	Transported in Bulk	
	According to MARPOL	
	73/78, Annex II, the	
	IBC Code	
	Regulatory Information	Conform to the provisions of ICAO/IATA.
	by Air	
	UN No.	1210
	Proper Shipping Name	PRINTING INK RELATED MATERIAL
	Class	3
	Packing Group	II
Regulations in Japan	Regulatory Information	Complies with the Fire Service Act.
	by Road or Rail	
	Regulatory Information	Conform to the provisions of the Ship Safety Law.
	by Sea	
	UN No.	1210
	Proper Shipping Name	PRINTING INK RELATED MATERIAL
	Class	3
	Packing Group	II
	Marine Pollutant	Not applicable
	Liquid Substance	Not applicable
	Transported in Bulk	
	According to MARPOL	
	73/78, Annex II, the	
	IBC Code	
	Regulatory Information	Conform to the provisions of the Civil Aeronautics Law.
	by Air	
	UN No.	1210
	Proper Shipping Name	PRINTING INK RELATED MATERIAL
	Class	3
	Packing Group	II
Emergency Response Guide		130
Number		

## Section 15 – REGULATORY INFORMATION

Industrial Safety and Health Act

the standards for work environment monitoring Article 65 part 2-1

Dangerous goods and hazardous goods for which the name, etc. should be indicated (Article 57, Paragraph 1 of the Act, Article 18, Item 2 ~ Item 3 of the Enforcement Order, Appended Table 2 of Article 30 of the Safety and Health Regulations)

Nitrocellulose  
Propyl alcohol  
Methyl propyl ketone

Dangerous or Harmful Substances Subject to Be Indicated their Names, etc.  
(Article 57 part 1 ,Order Article 18 part 1 and 2, Attached Table9)

Chromium and its compounds (excluding chromic acid and chromate and dichromate and dichromate)

Hazardous and Explosive Products (Enforcement Ordinance Appendix 1 No. 1)

Dangerous Goods and Flammable Objects (Enforcement Ordinance Appendix 1 No. 2)

Dangerous Substances –Flammable substances(Order Article Appended Table 1 part 4)

Hazardous Substances to be notified in terms of Whose Names,etc  
(Article 57 part 2 ,Order Article 18 part 2-1and part 2, Attached Table9)

	Chromium and its compounds (excluding chromic acid and chromate and dichromate and dichromate) (Trade Secrets)
	Dangerous goods and hazardous goods whose names, etc. should be notified (Article 57-2, Paragraph 1 of the Act, Article 18-2, Item 2 ~ Item 3 of the Enforcement Order, Article 34-2 Appended Table 2 of the Safety and Health Regulations)
	Nitrocellulose (Ordinance on Industrial Safety and Health Number of Appended Tables 2: 1477) (Trade Secrets) Propyl alcohol (Ordinance on Industrial Safety and Health Number of Appended Tables 2: 1780) (Trade Secrets) Methyl propyl ketone (Ordinance on Industrial Safety and Health Number of Appended Tables 2: 2135) (Trade Secrets)
	Materials for special medical examinations and current handling workers (Industrial Safety and Health Act 66 2 and Order for Enforcement of Industrial Safety and Health Act Article 22 (i))
Industrial Safety and Health Act (after 2024/4/1)	Dangerous or Harmful Substances Subject to Be Indicated their Names, etc. (Article 57 part 1, Order Article 18 part 1 and 2, Attached Table 9)
	Hazardous Substances to be notified in terms of Whose Names, etc. (Article 57 part 2, Order Article 18 part 2-1 and part 2, Attached Table 9)
Industrial Safety and Health Act (Substances subject to labeling and notification, Carcinogenic substances) (Implementation in Reiwa 8)	Chromium and its compounds (excluding hexavalent chromium compounds) (Trade Secrets) Dangerous goods and hazardous goods for which the name, etc. should be indicated (Article 57, Paragraph 1 of the Act, Article 18, Item 2 ~ Item 3 of the Enforcement Order, Appended Table 2 of Article 30 of the Safety and Health Regulations)
	Nitrocellulose Propyl alcohol Methyl propyl ketone Dangerous goods and hazardous goods whose names, etc. should be notified (Article 57-2, Paragraph 1 of the Act, Article 18-2, Item 2 ~ Item 3 of the Enforcement Order, Article 34-2 Appended Table 2 of the Safety and Health Regulations)
	Nitrocellulose (Ordinance on Industrial Safety and Health Number of Appended Tables 2: 1477) (Trade Secrets) Propyl alcohol (Ordinance on Industrial Safety and Health Number of Appended Tables 2: 1780) (Trade Secrets) Methyl propyl ketone (Ordinance on Industrial Safety and Health Number of Appended Tables 2: 2135) (Trade Secrets)
Industrial Safety and Health Act (Substances subject to labeling and notification, Carcinogenic substances) (Implementation in Reiwa 9)	Dangerous goods and hazardous goods for which the name, etc. should be indicated (Article 57, Paragraph 1 of the Act, Article 18, Item 2 ~ Item 3 of the Enforcement Order, Appended Table 2 of Article 30 of the Safety and Health Regulations)
	Nitrocellulose Propyl alcohol Methyl propyl ketone Dangerous goods and hazardous goods whose names, etc. should be notified (Article 57-2, Paragraph 1 of the Act, Article 18-2, Item 2 ~ Item 3 of the Enforcement Order, Article 34-2 Appended Table 2 of the Safety and Health Regulations)
	Nitrocellulose (Ordinance on Industrial Safety and Health Number of Appended Tables 2: 1477) (Trade Secrets) Propyl alcohol (Ordinance on Industrial Safety and Health Number of Appended Tables 2: 1780) (Trade Secrets)

	Methyl propyl ketone (Ordinance on Industrial Safety and Health Number of Appended Tables 2:2135) (Trade Secrets)
	Organic Solvent Poisoning Prevention Regulations Article 1-2 (Class 2 Organic Solvents, etc.), Enforcement Ordinance Appendix 6-2 Not applicable
Poisonous and Deleterious Substances Control Act	Not applicable
Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof	Not applicable
Act on the Regulation of Manufacture and Evaluation of Chemical Substances	Priority Assessment Chemical Substances (Article 2 part 5)
Fire Service Act	Hazardous Materials Category IV inflammable liquids Class I petroleum non water-soluble Packing Group II
Water Pollution Prevention Act	Hazardous substances (Article 2, Ordinance of Enforcement, article 2, Ordinance 1) that prescribe wastewater standards) Specified substances (article 2, paragraph 4 of the Act, article 3 of the Enforcement Ordinance)
Foreign Exchange and Foreign Trade Act	Import Trade Control Order Appended Table I part 1
Ship Safety Law Aviation Law	Import Trade Control Order Appended Table I part 16 Export approved goods, specified hazardous waste, etc. (Article 48, Paragraph 3 of the Law, Article 2, Attached Table 2, Paragraph 35-2 of the Export Order) Flammable liquids (Order Article 3, Appended Table I) Flammable liquids (Order Article 194, Appended Table I)

## Section 16 – OTHER INFORMATION

Industrial Safety and Health Act	Second-class organic solvents, etc. contain more than 5% of Second-class organic solvents.  In the case where “composition and ingredient information” corresponds to the secret of the business, the description of the content is the conventional range display. However, it is possible to notify us separately by the method of information transmission agreed with the customer, such as a confidentiality agreement. For more information, please contact our sales representative.  Isopropyl alcohol belongs to propyl alcohol. 3-methyl-2-butanone and Methyl isopropyl ketone are the same substances. Methyl isopropyl ketone belongs to Methyl propyl ketone.
Act on the Regulation of Manufacture and Evaluation of Chemical Substances	We have a Priority Assessment Chemical Substance posting threshold of 0.1% or more.  The posting of a Priority Assessment Chemical Substance in SDS is as of November 2019 as an effort.
Foreign Exchange and Foreign Trade Act	In law, printing inks are not approved for export
Fire Service Act Poisonous and Deleterious Substances Control Act	The flash point of Class I petroleum is less than 21 ° c. The deleterious substances is only applicable to the material, and the mixture is non-applicable.  Substances treated as equipment are exempt from this law.

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RoHS Specified Substance Concentration	Cd<100ppm Pb, Hg, Cr(VI), PBB, PBDE, DEHP, DBP, BBP, DIBP <1000ppm
Allowable concentration Standards Cited Literature	TLV-TWA: Threshold Limit Values-Time Weighted Average STEL (Short Term Exposure Limit JIS Z7253:2019 1) International Chemical Safety Cards 2) National Institute of Technology and Evaluation (NITE), Japan 3) Site for Safe Workplace by Ministry of Health, Labour and Welfare, Japan 4) EZSDS(JCDB)
Additional Information about This Product:	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.