Conforms to Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals

SAFETY DATA SHEET

Agilent Technologies

KBr Powder

Section 1. Identification

Product identifier	: 🕅 Powder	
Part no.	: PIKE-160-8010, HARRICK-KBR-100	
Chemical identity	: Potassium bromide	
Relevant identified uses of the substance or mixture and uses advised against		
Identified uses	 Reagents and Standards for Analytical Chemistry Laboratory Use PIKE-160-8010 KBR 100 G POWDER HARRICK-KBR-100 KBR powder, 100 grams, 1/pk 	
Supplier/Manufacturer	: Agilent Technologies Australia Pty Ltd 679 Springvale Road Mulgrave Victoria 3170, Australia 1800 802 402	
Emergency telephone number (with hours of operation)	: CHEMTREC®: +(61)-290372994	

Section 2. Hazard(s) identification

Classification of the substan	ice or mixture
⊮ 319	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A

GHS label elements

Hazard pictograms	
Signal word	: WARNING
Hazard statements	: 📕 319 - Caus

Signal word	:	WARNING
Hazard statements	:	₩319 - Causes serious eye irritation.
Precautionary statements		
Prevention	:	₽280 - Wear eye or face protection.
Response	-	 ₱305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.
Storage	:	Not applicable.
Disposal	:	Not applicable.
Supplemental label element	S	
Additional warning phrases	1	Not applicable.
Other hazards which do not result in classification	:	None known.

1/9

Section 3. Composition and ingredient information

Substance/mixture

: Substance

CAS number/other identifiers

Ingredient name	% (w/w)	CAS number
Potassium bromide	100	7758-02-3

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.

The total concentration of ingredients in this product, reported or not in this section, is 100%.

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

Section 4. First aid measures

Description of necessary 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	Fush 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.

Most important symptoms/effects, acute and delayed		
Potential acute health e	effects	
Eye contact	: Causes serious eye irritation.	
Inhalation	 Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs. 	
Skin contact	: No known significant effects or critical hazards.	
Ingestion	: No known significant effects or critical hazards.	
Over-exposure signs/symptoms		
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness	
Inhalation	 Adverse symptoms may include the following: respiratory tract irritation coughing 	
Skin contact	: No specific data.	
Ingestion	: No specific data.	

2/9

Section 4. First aid measures

Indication of immediate med	dical attention and special treatment needed, if necessary	
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. 	
Specific treatments	: No specific treatment.	
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation	

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: No specific fire or explosion hazard.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: halogenated compounds metal oxide/oxides
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.
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.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures			
For non-emergency personnel	action shall be taken involving any personal risk or without suitab acuate surrounding areas. Keep unnecessary and unprotected pe ering. Do not touch or walk through spilt material. Avoid breathir equate ventilation. Wear appropriate respirator when ventilation is t on appropriate personal protective equipment.	ersonnel from ng dust. Provide	
For emergency responders	pecialised clothing is required to deal with the spillage, take note ormation in Section 8 on suitable and unsuitable materials. See a ormation in "For non-emergency personnel".		
Environmental precautions	bid dispersal of spilt material and runoff and contact with soil, wate d sewers. Inform the relevant authorities if the product has cause lution (sewers, waterways, soil or air).		
Methods and material for containment and cleaning up			

Methods for cleaning up : Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

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Precautions for safe handling	1	
Protective measures	:	Fut on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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.
Conditions for safe storage, including any incompatibilities	:	Store in accordance with local regulations. 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. 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 and personal protection

Control parameters		
Occupational exposure limits		
None.		
Biological exposure indices		
No exposure indices known.		
Appropriate engineering controls	e only with adequate ventilation. If user operations generate of oour or mist, use process enclosures, local exhaust ventilatior gineering controls to keep worker exposure to airborne contar ommended or statutory limits.	n or other
Environmental exposure controls	issions from ventilation or work process equipment should be y comply with the requirements of environmental protection le ses, fume scrubbers, filters or engineering modifications to the ipment will be necessary to reduce emissions to acceptable l	gislation. In some process
Individual protection measur		
Hygiene measures	ish hands, forearms and face thoroughly after handling cheming, smoking and using the lavatory and at the end of the wor propriate techniques should be used to remove potentially cor sh contaminated clothing before reusing. Ensure that eyewa ety showers are close to the workstation location.	king period. ntaminated clothing.
Eye/face protection	ety eyewear complying with an approved standard should be sessment indicates this is necessary to avoid exposure to liqu ses or dusts. If contact is possible, the following protection sh ess the assessment indicates a higher degree of protection: ggles. If operating conditions cause high dust concentrations st goggles.	id splashes, mists, ould be worn, chemical splash
Skin protection		

4/9

Section 8. Exposure controls and personal protection

Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
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.

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

<u>Appearance</u>			
Physical state	1	Solid. [Powder.]	
Colour	1	Colourless.	
Odour	1	Odourless.	
Odour threshold	1	Not available.	
рН	1	Not available.	
Melting point/freezing point	1	730°C (1346°F)	
Boiling point, initial boiling point, and boiling range	:	1435°C (2615°F)	
Flash point	:	Not applicable.	
Evaporation rate	1	Not available.	
Flammability	1	Not available.	
Lower and upper explosion limit/flammability limit	:	Not applicable.	
Vapour pressure	1	Not available.	
Relative vapour density	1	Not applicable.	
Relative density	1	2.75	
Density	1	2.75 g/cm³ [25°C (77°F)]	
Solubility(ies)	1	Media	Result
		water	Soluble
Solubility in water	:	<mark>6</mark> 50 g/l	
Partition coefficient: n- octanol/water	:	Not available.	
Auto-ignition temperature		Not applicable.	
Decomposition temperature	4	Not available.	
Viscosity	1	Not applicable.	
Particle characteristics			
Median particle size	1	Not available.	

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredien	ts.
Chemical stability	: The product is stable.	
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.	
Conditions to avoid	: No specific data.	
Incompatible materials	: May react or be incompatible with oxidising materials. Reactive or incompatible with the following materials: acids.	
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.	

Section 11. Toxicological information

Information on toxicological effects

Date of issue/Date of revision

: 28/06/2023

Product/ingredient name	R	esult	Species	Dose	Exposure
Potassium bromide	L	D50 Oral	Rat	3070 mg/kg	-
Irritation/Corrosion					I
Not available.					
<u>Sensitisation</u>					
Not available.					
<u>Mutagenicity</u>					
Conclusion/Summary	:	Not available.			
Carcinogenicity					
Conclusion/Summary	:	Not available.			
Reproductive toxicity					
Conclusion/Summary	:	Sasses through the placental	barrier in hum	ans.	
<u>Teratogenicity</u>					
Conclusion/Summary	:	Not available.			
<u>Specific target organ toxici</u>	<u>ty (</u>	<u>single exposure)</u>			
Not available.					
Specific target organ toxici	ty (I	repeated exposure)			
Not available.					
Aspiration hazard					
Not available.					
nformation on likely routes		Routes of entry anticipated: O	ral Dermal In	halation Eves	
f exposure	-	, toutoo of only anticipatou. o	iai, Boiniai, in		
otential acute health effect	<u>s</u>				
Eye contact	:	Causes serious eye irritation.			
Inhalation	;	Exposure to airborne concentri limits may cause irritation of th		5	ended exposure
••••	1.1	No known significant effects o	r critical hazar	ds.	
Skin contact					

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Date of previous issue : 27/03/2017 Version : 5 6/9
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Section 11. Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	 Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: 📈 specific data.
Ingestion	: No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure		
Potential immediate effects	Not available.	
Potential delayed effects	Not available.	
<u>Long term exposure</u>		
Potential immediate effects	Not available.	
Potential delayed effects	Not available.	
Potential chronic health eff	<u>ts</u>	
General	Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation	ation.
Carcinogenicity	No known significant effects or critical hazards.	
Mutagenicity	No known significant effects or critical hazards.	
Reproductive toxicity	No known significant effects or critical hazards.	

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	(mg/kg)	Inhalation (gases) (ppm)	(vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Potassium bromide	3070	N/A	N/A	N/A	N/A

Other information

: Adverse symptoms may include the following: nausea or vomiting Can cause central nervous system (CNS) depression. (Ingestion)

Section 12. Ecological information

<u>Toxicity</u>			
Product/ingredient name	Result	Species	Exposure
Potassium bromide	Acute LC50 >100 mg/l Fresh water	Fish - <i>Pimephales promelas</i> - Juvenile (Fledgling, Hatchling, Weanling)	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Section 12. Ecological information

Product/ingredient name	LogPow	BCF	Potential
Potassium bromide	-	1.41	Low

<u>Mobility in soil</u>	
Soil/water partition coefficient (Koc)	: Not available.
Other adverse effects	: No known sign

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods	: 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. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or
	emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

ADG / IMDG / IATA	÷	Not regulated as Dangerous Goods according to the ADG Code .
Special precautions for user	:	Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage

Transport in bulk according : Not available. to IMO instruments

Section 15. Regulatory information

Standard for the Uniform	Scheduling of N	ledicines and Poisons	
Not regulated. Model Work Health and Sa	afety Regulation	ns - Scheduled Substance	S
No listed substance			-
International regulations Chemical Weapon Conve Not listed.	ention List Sche	dules I, II & III Chemicals	
Montreal Protocol Not listed.			
Stockholm Convention of Not listed.	<u>n Persistent Or</u>	ganic Pollutants	
Rotterdam Convention o Not listed.	n Prior Informe	<u>d Consent (PIC)</u>	
UNECE Aarhus Protocol Not listed.	on POPs and H	<u>eavy Metals</u>	
Inventory list			
Date of issue/Date of revision	: 28/06/2023	Date of previous issue	: 27/03/2017

Version :5

Section 15. Regulatory information

Australia	: This material is listed or exempted.
New Zealand	: This material is listed or exempted.
United States	: This material is active or exempted.

Section 16. Any other relevant information

<u>History</u>	
Date of issue/Date of revision	: 28/06/2023
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Key to abbreviations	 ADG = Australian Dangerous Goods ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road 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) N/A = Not available SUSMP = Standard Uniform Schedule of Medicine and Poisons UN = United Nations

Procedure used to derive the classification

Classification	Justification
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A	Expert judgment

✓ Indicates information that has changed from previously issued version.

Notice to reader

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