



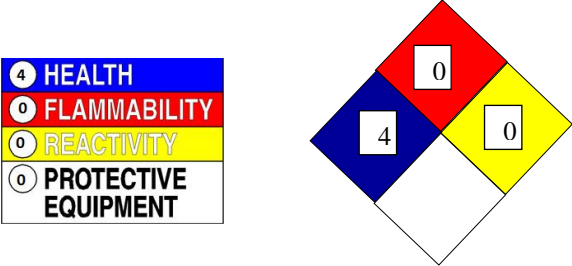


Safety Data Sheet


Revision date: 04.04.2015



Date of issue: 30.03.2015

Sr. No.	Title of the section	Information required in this section
1.	Identification of the substance & of the company	
1.1	Identification of the substance or preparation	1.1.1 Trade Name : Sharda Diquat Dibromide 37.3% SL ABN: Diquash Landscape & Aquatic Herbicide 1.1.2 EPA Registration No. of the chemical: 83529-12
1.2	Other identification	1.2.1 Active Substance name: 3,6-dichloro-o-anisic acid 1.2.2 CAS No.: 85-00-7
1.3	Use of the substance/ preparation	1.3.1 Recommended uses: ✓ Herbicide application ✓ Diquat dibromide can be used to treat irrigation systems and agricultural drainage systems. 1.3.2 Restricted uses: Not known as on date
1.4	Company/ under - taking identification	1.3.1 Company name: Sharda USA LLC 1.3.2 Contact Person : Sharon Gunning, Director, Supply Chain and Administrative Operations 1.3.3 Manufacturing site address: Universal Cooperatives, Inc. 1253 Independence Dr, Napoleon OH 43545 1.3.4 Telephone number: +91 22 5678 2800 1.3.5 Fax number : +91 22 5678 2828, +91 22 5678 2808 1.3.6 E-mail : shardain@vsnl.com ; WEBSITE: http://www.shardausa.com
1.5	Emergency telephone	1.5.1 Emergency telephone number : 1(800) 222-1222 CHEMTREC PHONE: 1(800) 424-9300 1.5.2 Telephone number of USA importer: (610) 350-6930 1.5.3 Opening hours: 24 hrs
2.	Hazard Identification	
2.1	Classification of the substance according to Regulation 1910.1200 [GHS]	<p>Classification: Eye Damage 1, Skin irritation 2, Acute Tox. 3 – Oral, Skin Sensitization 1, Acute Tox. 2 – Inhalation, STOT SE 3, STOT RE 1, Aquatic Acute 1, Aquatic Chronic 3</p> <p>Hazard statement :</p> <ul style="list-style-type: none"> • H318 – Causes serious eye damage • H315 - Causes skin irritation • H301 – Toxic if swallowed • H317 – May cause an allergic skin reaction • H330 – Fatal if inhaled • H335 – May cause respiratory irritation • H372 – Cause damage to organs through prolonged or repeated exposure • H400 – Very toxic to aquatic life • H412 - Harmful to aquatic life with long lasting effects <p>Signal Word : Danger</p> <p>Hazard pictograms :</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  GHS07 </div> <div style="text-align: center;">  GHS08 </div> <div style="text-align: center;">  GHS09 </div> <div style="text-align: center;">  GHS06 </div> </div> <p>Precautionary statements :</p> <p>P264 – Wash face, hands and any exposed skin thoroughly after handling P280 – Wear protective gloves/ protective clothing/eye protection/face protection. P330 – Rinse mouth P301 + P312 – IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P501 – Dispose of contents/ container in accordance with local/ regional/national/international regulation P302 + P352 – IF ON SKIN: Wash with plenty of soap and water. P332 + P313 – If skin irritation occurs: Get medical advice/attention</p>

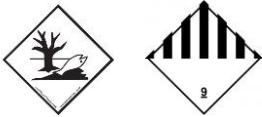
		<p>P321 – Specific treatment (Reference to supplemental first aid instruction on the label). P362 – Take off contaminated clothing and wash before reuse. P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P261 – Avoid breathing dust/fume/gas/mist/vapours/ spray. P272 – Contaminated work clothing should not be allowed out of the workplace. P302 + P352 – IF ON SKIN: Wash with plenty of soap and water. P333 + P313 – If skin irritation or rash occurs: Get medical advice/attention. P405 – Store locked up. P270 – Do not eat, drink or smoke when using this product. P314 – Get medical advice/ attention if you feel unwell. P273 – Avoid release to the environment. P363 – Wash contaminated clothing before reuse. P284 – Wear respiratory protection P310 – Immediately call a POISON CENTER or doctor/physician. P320 – Specific treatment is urgent (see if immediate administration of antidote is required on this label). P312 – Call a POISON CENTER or doctor/physician if you feel unwell. P403 + P233 – Store in a well-ventilated place. Keep container tightly closed. P260 – Do not breathe dust/fume/ gas/mist/vapours/spray. P271 – Use only outdoors or in a well-ventilated area. P304 + P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing</p>									
2.2	Other Information	<p>Hazard Ratings : NFPA Health: 4 Flammability: 0 Reactivity: 0</p> <p>Hazard Ratings : HMIS Health: 4 Flammability: 0 Reactivity: 0</p>  <p>ROUTES OF ENTRY: Ingestion, Inhalation, eye, and dermal contact</p>									
3. Composition /Information on Ingredients											
3.1	Composition	<p>List of raw materials in the mixture with hazardous/ non-hazardous additional</p> <table border="1"> <thead> <tr> <th>% Conc.</th> <th>CAS no.</th> <th>Substance name</th> </tr> </thead> <tbody> <tr> <td>91.42%</td> <td>85-00-7</td> <td>Diquat Concentrate</td> </tr> <tr> <td>85.8 %</td> <td>7732-18-5</td> <td>Water</td> </tr> </tbody> </table>	% Conc.	CAS no.	Substance name	91.42%	85-00-7	Diquat Concentrate	85.8 %	7732-18-5	Water
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91.42%	85-00-7	Diquat Concentrate									
85.8 %	7732-18-5	Water									
3.2	Common name and synonyms	Details not known									
3.3	Classified Impurities and stabilizing additives contributing to classification of the chemical	No major known impurity have Carcinogen, Mutagen & Reprotoxic (CMR) classification which can contribute to the Classification & Labelling of the chemical.									
4. First Aid Measures											
4.1	Description of first aid measures	<p>- General Information: Immediately remove any clothing soiled by the product. Symptoms of poisoning may even occur after several hours; medical observation for at least 48 hrs after the accident is recommended. Remove breathing apparatus only after contaminated clothing have been completely removed. In case of irregular breathing or respiratory arrest provide artificial respiration.</p> <p>- Inhalation: Remove source of contamination or move victim to fresh air. Keep victim warm and at rest. Treat symptomatically and supportively. Obtain medical advice if necessary.</p>									

		<p>- Skin contact: Remove contaminated clothing, shoes and leather goods. Wash skin gently and thoroughly with water and non-abrasive soap. Persons who become sensitised may require specialised medical management with anti-inflammatory agents.</p> <p>- Eye contact: Immediately flush the eyes with gently flowing lukewarm water or saline solution for 20 minutes, occasionally lifting the upper and lower lids. Specialised ophthalmologic treatment might be required.</p> <p>- Oral: Do not induce emesis. Seek medical advice.</p>
4.2	Important symptoms & effects	Possible symptoms are as per the hazard identified in section 2 of the SDS, known symptoms being skin and eye irritation, causing redness and pain.
4.3	Immediate medical attention	<p>Notes for the doctor: There is no specific antidote. Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.</p> <p>For 24-hour medical emergency assistance (human or animal) call 1-800-222-1222. For chemical emergency assistance (spill, leak, fire, or accident) call ChemTrec at 1-800-424-9300.</p>
5.	Fire Fighting Measures	
5.1	suitable extinguishing media	Water, foam, carbon dioxide.
5.2	Special hazard arising from the chemical	Carbon oxides, Hydrogen chloride gas, nitrogen oxides (NOx)
5.3	Special protective equipment and precautions for firefighters	As in any fire, wear full protective clothing and self-contained breathing apparatus with full face piece operated in pressure-demand or other positive pressure mode.
6.	Accidental Release Measures	
6.1	Personal precautions, protective equipment and emergency procedures	<p>6.1.1 For non-emergency personnel</p> <ul style="list-style-type: none"> ➤ Protective equipment: Wear appropriate protective eyeglasses, splash goggles or chemical safety goggles and appropriate respiratory equipment. Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls as appropriate to prevent skin contact. ➤ Emergency procedures: Remove an incapacitated worker from further exposure. Keep unconscious victims warm and on their sides to avoid choking if vomiting occurs. Initiate the measures / procedures as mentioned in Section 4. ➤ Removal of ignition sources: Disconnect electrical connection and all other sources of ignition. ➤ Provision of sufficient ventilation: Adequate ventilation should be provided when accidental release occurs. <p>6.1.2 For emergency responders: Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Do not touch the spilled material. Avoid the spread of the spillage by using adsorbents, if this can be done without risks. Ground all equipment containing material.</p>
6.2	Methods and material for containment and cleaning up	<p>(a) Cleaning techniques: Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.</p> <p>(b) Vacuuming techniques: Sweep or vacuum up spillage and collect in suitable container for disposal</p> <p>(c) Equipment required for containment/clean-up: Use approved industrial vacuum cleaner for removal. Shovel into suitable container for disposal.</p>

7.		Handling and Storage
7.1	Precautions for safe handling	<p>7.1.1. Recommendations shall be specified to: Read label carefully before use. Avoid contact with skin, eyes or clothing. Avoid breathing dust. Remove personal protective equipment (PPE) immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.</p> <p>7.1.2. Advice on general occupational hygiene: (a) not to eat, drink and smoke in work areas (b) to wash hands after use; and (c) To remove contaminated clothing and protective equipment before entering eating areas</p>
7.2	Conditions for safe storage, including any incompatibilities	<p>(a) How to manage risks associated with storage : Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco product in the storage area. Prevent eating, drinking, tobacco use and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.</p> <p>(b) Other advice including: Do not contaminate water, food, or feed by storage or disposal. Store in cool place. Keep container tightly closed in a dry and well-ventilated place.</p>
8.		Exposure Controls / Personal Protection
8.1	Control parameters	Medium – AIR Specification –Work Place
		Country Exposure limit description
		Australia Threshold limit value (TLV) - Time-weighted average (TWA) = 0.5 mg/m3 - Short-term exposure limit (STEL) = 1 mg/m3
		Belgium Tolerable limit value (TLV) - Time-weighted average (TWA) = 0.5 mg/m3 - Short-term exposure level (STEL) = 1 mg/m3
		Bulgaria Maximum permissible concentration - Time-weighted average (TWA) = 0.5 mg/m3
		Finland Maximum permissible concentration - Time-weighted average (TWA) = 0.5 mg/m3 - Short-term exposure limit (STEL) = 1.5 mg/m3
		Switzerland Maximum work-site concentration (MAK) - Time-weighted average (TWA) = 0.5 mg/m3
		USA (OSHA) Permissible exposure limit (PEL) - Time-weighted average (TWA) = 0.5 mg/m3
		USA(ACGIH) Threshold limit value (TLV) - Time-weighted average (TWA) = 0.5 mg/m3
		United Kingdom Recommended limit (RECL) - 8-h time-weighted average (TWA) = 0.5 mg/m3 - Short-term exposure level (STEL) = 1 mg/m3 (10-min time-weighted average)
8.2.	Exposure controls	
8.2.1	Appropriate engineering controls	A system of general or local exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value needs to be provided. Ensure that eyewash stations and safety showers are proximal to the work-station location. Do not release to the atmosphere or water streams.
8.2.2	Individual protection measures	<p>(a) Eye / face protection: Wear appropriate protective eyeglasses, splash goggles or chemical safety goggles and face shield.</p> 

		<p>(b) Skin protection: Wear appropriate protective clothing like impervious lab coat, apron or coveralls.</p> <p>(i) Hand protection: Use compatible chemical / solvent resistant protective gloves made of suitable materials like rubber, plastic, etc.</p>  <p>(ii) Other: Wear appropriate boots and other footwear.</p> <p>(c) Respiratory protection: In case of brief exposure or low pollution, use respiratory filter device. In case of intensive or longer exposure, use self-contained respiratory protective device. Short term filter device: Filter AX. In case of emergency spills, use a NIOSH approved respirator with any N, R, P, or HE filter.</p>  <p>(d) General protective and hygienic measures:</p> <ul style="list-style-type: none"> • Keep away from foodstuffs, beverages and feed. • Immediately remove all soiled and contaminated clothing. • Wash hands before breaks and at the end of work. • Store protective clothing separately.
<p>9. Physical & Chemical Properties</p>		
<p>9.1</p>	<p>Information on basic physical and chemical properties</p>	<p>(a) Appearance: Liquid (b) Odour: None (c) Auto-ignition temperature: Not applicable (d) pH of liquid formulation : 4.5 (e) Partition coefficient: n-octanol/water: 3.05 (f) Boiling point : > 200⁰C (g) Bulk Density : 10.08 lb/gal at 240C (h) Vapour pressure : 1.67 mPa (25⁰C) (i) Flammability (solid, gas): Not applicable (j) Upper/lower flammability or explosive limits: Not applicable (k) Solubility (ies): (water) 6.1 g/L (25⁰C)</p>
<p>9.2</p>	<p>Other information</p>	<p>Relative Density: 1.488 at 25⁰C</p>
<p>10. Stability and Reactivity</p>		
<p>10.1</p>	<p>Reactivity</p>	<p>Not known</p>
<p>10.2</p>	<p>Chemical stability</p>	<p>Stable at normal temperature and pressure</p>
<p>10.3</p>	<p>Possibility of hazardous reactions</p>	<p>No information known</p>
<p>10.4</p>	<p>Conditions to avoid</p>	<p>Not known</p>
<p>10.5</p>	<p>Incompatible materials</p>	<p>It poses a fire and explosion hazard in the presence of strong oxidizers</p>
<p>10.6</p>	<p>Hazardous decomposition products</p>	<p>Thermal decomposition of diquat dibromide will release toxic oxides of nitrogen and carbon and toxic and corrosive fumes of bromides</p>

11. Toxicological Information	
11.1	<p>Information on toxicological effects</p> <p>(a) acute toxicity: Acute oral toxicity -4; Acute inhalation toxicity - 2 (b) skin corrosion/irritation: irritant to skin in category 2 (c) serious eye damage/irritation: eye irritant in category 2 (d) respiratory or skin sensitization: Skin sensitizing in category 1 (e) Carcinogenicity: no known evidence (g) reproductive toxicity: no known evidence (h) STOT-single exposure: STOT SE 1 (i) STOT-repeated exposure: STOT RE 1</p>
11.2	<p>Numerical measures of toxicity (such as acute toxicity estimates)</p> <p>Oral LD50 (Rat) = 120 mg/kg; 233 mg/kg in mice, and 188 mg/kg in rabbits. Inhalation: Inhalation of diquat dibromide may cause coughing and sore throat. Exposing the skin and eyes may cause redness and pain. Neurotoxicity: No evidence for neurotoxic effects in rats dosed up to 400 ppm ion in the diet for 13 weeks.; but symptoms of headache; confusion, excitement, mania, disorientation, emotional ability; Depression, stupor, coma, respiratory failure, often without convulsions. Intense nausea, vomiting and diarrhea may occur. Reproductive Effects: Mutagenicity: No evidence in the in vivo assays; Rats receiving 25 mg/kg decreased their food intake and showed slowed growth, but had unchanged reproduction. Development Toxicity: In rabbit studies, a small percentage of fetuses had minor defects at 3 and 10 mg ion/kg/d Chronic/Subchronic Toxicity Studies: Kidney weight decreases and cataracts seen in dogs at 12.5 mg ion/kg/d Eye irritation - Cataracts, a clouding of the eyes which interferes with light entering the eye, occurred in rats and dogs given 2.5 mg/kg and 5 mg/kg of diquat dibromide , respectively. Skin irritation - The effects of repeated, or prolonged, dermal contact with diquat dibromide range from inflammation of the skin, to general bodily ('systemic') poisoning, as evidenced by injury to internal organs, primarily the kidneys. Repeated applications of 42 mg/kg of diquat dibromide killed four out of six rabbits tested. While rats fed 50 mg/kg of diquat dibromide for two years did not die from testing, their food intake and growth was decreased. STOT RE - Repeated inhalation exposure of rats to 1.9 mg/m³ caused inflammatory changes in connective tissues, damage to the kidneys and heart, abnormal levels of several liver enzymes, low white blood cell counts, high red blood cell counts, and depressed cholinesterase activity</p>
11.3	<p>Chemical if, listed in NTP or IARC or by OSHA as Carcinogens</p> <p>Diquat dibromide is not classified as a tumor-causing chemical. An 80-week feeding study showed that dietary doses of 15 mg/kg/day of diquat dibromide did not cause tumors in rats. Likewise, dietary levels of 36 mg/kg/day for two years did not induce tumors in rats</p>
11.4	<p>Other information</p> <p>Product shows following danger according to internally approved calculation methods for preparation</p> <ul style="list-style-type: none"> ▪ Very Toxic ▪ Dangerous for the environment
12. Ecological Information	
12.1	<p>Eco – Toxicity</p> <p>Freshwater Algae Data : 96 Hr EC50 Selenastrum capricornutum = 0.011 mg/L Water Flea Data: 48 Hr EC50 Daphnia magna = 1.2 mg/L Rainbow Trout 96-hour LC50 = 21 mg/L Mirror Carp 96 hours LC50 = 67 mg/L</p>
12.2	<p>Persistence and degradability</p> <p>Probability of Rapid Biodegradation (BIOWIN v4.10): Biowin1 (Linear Model Prediction) : Biodegrades Fast Biowin2 (Non-Linear Model Prediction): Does Not Biodegrade Fast Biowin3 (Ultimate Biodegradation Timeframe): Weeks-Months Biowin4 (Primary Biodegradation Timeframe): Days-Weeks Biowin5 (MITI Linear Model Prediction) : Does Not Biodegrade Fast Biowin6 (MITI Non-Linear Model Prediction): Does Not Biodegrade Fast</p>

		Biowin7 (Anaerobic Model Prediction): Does Not Biodegrade Fast Ready Biodegradability Prediction: NO Ready Biodegradability Prediction: Does Not Biodegrade Fast																				
12.3	Bioaccumulative potential	Summary Results: Log BCF (regression-based estimate): 0.50 (BCF = 3.16 L/kg wet-wt) Biotransformation Half-Life (days) : 0.0076 (normalized to 10 g fish) Log BAF (Arnot-Gobas upper trophic): -0.05 (BAF = 0.893 L/kg wet-wt)																				
12.4	Environmental fate (exposure)	Persistence: Typical half-life is 1000 d. Diquat dibromide is highly persistent due to strong binding to clay and unavailability to microbes. Diquat dibromide in soil is not taken up by plants, so any crop can be seeded at any time after application. Mobility: Immobile in soil (Diquat) Level III Fugacity Model:																				
		<table border="1"> <thead> <tr> <th></th> <th>Mass Amount (%)</th> <th>Half-Life (hr)</th> <th>Emissions (kg/hr)</th> </tr> </thead> <tbody> <tr> <td>Air</td> <td>1.05e-005</td> <td>11</td> <td>1000</td> </tr> <tr> <td>Water</td> <td>10.3</td> <td>900</td> <td>1000</td> </tr> <tr> <td>Soil</td> <td>84.1</td> <td>1.8e+003</td> <td>1000</td> </tr> <tr> <td>Sediment</td> <td>5.57</td> <td>8.1e+004</td> <td>0</td> </tr> </tbody> </table>		Mass Amount (%)	Half-Life (hr)	Emissions (kg/hr)	Air	1.05e-005	11	1000	Water	10.3	900	1000	Soil	84.1	1.8e+003	1000	Sediment	5.57	8.1e+004	0
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		Persistence Time: 1.95e+003 hr Reaction Time: 2.45e+003 hr Advection Time: 9.56e+003 hr Percent Reacted: 79.6 Percent Advected: 20.4																				
12.5	Other adverse effects	The product in not a PBT chemical																				
13.	Disposal Considerations																					
13.1	Waste treatment methods	(a) Waste treatment containers and methods: <u>Waste Disposal Method:</u> Product disposal – Pesticide wastes may be acutely hazardous. Improper disposal is a violation of federal law. Pesticide, mixtures, or equipment rinse water that cannot be chemically reprocessed must be disposed of according to applicable federal, state or local regulations. Contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional office for guidance. <u>Container disposal</u> – Dispose of product containers, waste containers, and residues according to label instructions and local, state, and federal health and environmental regulations. (b) Sewage disposal: Sewage disposal shall be discouraged																				
13.2	Additional information:	RCRA HAZARD CLASS: Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.																				
14.	Transport Information																					
	(Information includes RID, ADR, AND, ICAO, DOT, IMDG, IATA-DGR)	14.1. UN number : UN3082  14.2. UN proper shipping name : ADR: 3082 Environmentally hazardous substance, solid toxic, n.o.s (diquat dibromide), DOT: Environmentally hazardous substance, solid toxic, n.o.s (diquat dibromide) IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID , N.O.S (diquat dibromide), MARINE POLLUTANT IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID TOXIC, N.O.S (diquat dibromide) 14.3. Transport hazard class(es): 9 Miscellaneous dangerous substance and articles 14.4. Packing group : III 14.5. Environmental hazards (e.g., Marine pollutant (Yes/No)) : Yes																				

		<p>14.6. Special precautions for user : Warning : Miscellaneous dangerous substance and articles Danger code (kemler): 90 EMS number : F-A,S-F</p> <p>14.7. Quantity specification : Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: Not applicable</p>
15.	Regulatory Information	
15.1	Safety, health and environmental regulations/legislation	<ul style="list-style-type: none"> • Hazard statements: <ul style="list-style-type: none"> ✓ Harmful if inhaled. ✓ Harmful if swallowed. ✓ Causes moderate eye irritation. • Signal word – CAUTION • Precautionary statements : <ul style="list-style-type: none"> ✓ Avoid breathing spray mist. ✓ Avoid contact with eyes or clothing • Other regulations: Listed /not listed within the following regulation <ul style="list-style-type: none"> ✓ CERCLA/SARA 302 Reportable Quantity (RQ) Report product spills >= 250 gal. (based on diquat [RQ = 1,000 lbs.] content in the formulation) ✓ Sara - section 355 (extremely hazardous substance): Not listed ✓ TSCA (TOXIC SUBSTANCE CONTROL ACT) - listed ✓ EU CLP Regulation (EC) No 1272/2008 – listed ✓ Proposition 65 (chemical known to cause cancer) : Not listed ✓ Proposition 65 (chemical known to cause reproductive toxicity for females/ males) : Not listed ✓ U.S. EPA Carcinogens – Unlikely ✓ TLV : ACGIH : listed ✓ NIOSH – Ca (National Institute of Occupational Health and Safety) : Not listed ✓ OSHA – Ca (Occupational Health and Safety Administration) : Not listed
16.	Other Information	
16.1	Indication of changes	<p>Section 1: Identification of the substance/mixture and of the company/undertaking Section 2: Hazard Identification - Changes in Classification and Labelling. Section 3: Composition /Information on Ingredients Section 5: Fire-fighting measures Section 6: Accidental Release measures Section 7: Handling and storage. Section 8: Exposure Controls/Personal protection. Section 9: Physical and Chemical properties. Section 10: Stability and Reactivity. Section 11: Toxicological Information. Section 12: Ecological Information. Section 14: Transport labeling Section 15: Regulatory Information</p>
16.2	Abbreviations and acronyms	<ul style="list-style-type: none"> • OSHA: Occupational Safety and Health Administration • GHS: Globally harmonized system on classification and labelling • TWA: Time Weighted Average • STEL: Short Term Exposure Limit • PEL: Permissible Exposure Limits • ACGIH: American Conference of Governmental Industrial Hygienists • NIOSH: National Institute for Occupational Safety and Health • TLV: Threshold Limit Value • MARPOL: Marine pollution • IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk • IARC: International Agency for Research on Cancer • NTP: National Toxicology Program • CAS: Chemical Abstracts Service (division of the American Chemical Society) • LC50: Lethal concentration, 50 percent • LD50: Lethal dose, 50 percent • IMDG: International Maritime Code for Dangerous Goods IATA: International Air

		<p>Transport Association</p> <ul style="list-style-type: none"> • IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International Civil Aviation Organization • ICAO-TI: Technical Instructions by the "International Civil Aviation Organization"
<p>16.3</p>	<p>Key literature references and sources for data</p>	<ul style="list-style-type: none"> • EPI Suite calculation • PBT profiler • http://echa.europa.eu/search-chemicals;jsessionid=02A932957C1BA2098DAB8E49132CEFCB.live2 • http://www.agrian.com/pdfs/Diquat_2L_AG_MSDS.pdf • http://www.fws.gov/fisheries/aadap/06_Diquat/06_MSDSs/MSDS%2010-969_Diquat.pdf • http://www.pesticideinfo.org/Detail_Chemical.jsp?Rec_Id=PC33217 • http://www.speclab.com/compound/c85007.htm • http://edis.ifas.ufl.edu/pdffiles/SS/SS56900.pdf • Toxnet • http://extoxnet.orst.edu/pips/diquatdi.htm • http://pmep.cce.cornell.edu/profiles/extoxnet/dienochlor-glyphosate/diquat-ext.html • http://www.toxipedia.org/display/toxipedia/Diquat+Dibromide • http://www.cdc.gov/niosh/ipcsneng/neng1363.html [Accessed 83110]. • Pesticide Action Network North America. Diquat Dibromide. • http://www.chemnet.com/cas/en/85-00-7/Diquat.html • http://www.inchem.org/documents/hsg/hsg/hsg052.htm#SectionNumber:1.2

Disclaimer: This product is a registered agricultural chemical and must therefore be used in accordance with the container label directions. The information above is believed to be accurate and represents the best information currently available to us. No representation, guarantee or warranties of any kind are made as to its accuracy, suitability for a particular application or results to be obtained from them. This SDS shall be used as a guide only. Users should make their own investigations to determine the suitability of the information for their particular purposes. Consult Sharda USA LLC for further information.