SAFETY DATA SHEET

	1. Identification		
Product identifier	CHEMWORLD QK-401		
Other means of identification	None.		
Recommended use	Closed Loop Cleaning Product		
Recommended restrictions	None known.		
Manufacturer/Importer/Supplier	r/Distributor information		
Company name Address	ChemWorld 885 Woodstock Rd. Ste 430-111 Roswell, GA 30075 United States		
Telephone	(800) 668-7716		
Website	www.chemworld.com		
E-mail Emergency phone number	Sales@ChemWorld.com +1-(800)-255-3924 ChemTel		
	2. Hazard(s) identificati	on	
Physical hazards	Not classified.		
Health hazards	Serious eye damage/eye irritation	Category 2	
	Specific target organ toxicity, single exposure	e Category 3 respiratory tract	irritation
Signal word	Warning		
Signal word Hazard statement	Warning Causes serious eye irritation. May cause resp	piratory irritation.	
-	•	piratory irritation.	
Hazard statement	•	after handling. Use only outdo	oors or in a
Hazard statement Precautionary statement	Causes serious eye irritation. May cause resp Avoid breathing mist/vapor. Wash thoroughly	after handling. Use only outdo e protection. ep comfortable for breathing. I move contact lenses, if presen	f in eyes: Rinse t and easy to do.
Hazard statement Precautionary statement Prevention	Causes serious eye irritation. May cause resp Avoid breathing mist/vapor. Wash thoroughly well-ventilated area. Wear eye protection/face If inhaled: Remove person to fresh air and ke cautiously with water for several minutes. Re Continue rinsing. Call a poison center/doctor	after handling. Use only outdo e protection. ep comfortable for breathing. I move contact lenses, if presen if you feel unwell. If eye irritatio	f in eyes: Rinse t and easy to do. on persists: Get
Hazard statement Precautionary statement Prevention Response	Causes serious eye irritation. May cause resp Avoid breathing mist/vapor. Wash thoroughly well-ventilated area. Wear eye protection/face If inhaled: Remove person to fresh air and ke cautiously with water for several minutes. Re Continue rinsing. Call a poison center/doctor medical advice/attention.	after handling. Use only outdo e protection. ep comfortable for breathing. I move contact lenses, if presen if you feel unwell. If eye irritation er tightly closed. Store locked	f in eyes: Rinse t and easy to do. on persists: Get up.
Hazard statement Precautionary statement Prevention Response Storage	Causes serious eye irritation. May cause resp Avoid breathing mist/vapor. Wash thoroughly well-ventilated area. Wear eye protection/face If inhaled: Remove person to fresh air and ke cautiously with water for several minutes. Re Continue rinsing. Call a poison center/doctor medical advice/attention. Store in a well-ventilated place. Keep contain	after handling. Use only outdo e protection. ep comfortable for breathing. I move contact lenses, if presen if you feel unwell. If eye irritation er tightly closed. Store locked	f in eyes: Rinse t and easy to do. on persists: Get up.
Hazard statement Precautionary statement Prevention Response Storage Disposal Hazard(s) not otherwise classified (HNOC)	Causes serious eye irritation. May cause resp Avoid breathing mist/vapor. Wash thoroughly well-ventilated area. Wear eye protection/face If inhaled: Remove person to fresh air and ke cautiously with water for several minutes. Re Continue rinsing. Call a poison center/doctor medical advice/attention. Store in a well-ventilated place. Keep contain Dispose of contents/container in accordance	after handling. Use only outdo e protection. ep comfortable for breathing. I move contact lenses, if presen if you feel unwell. If eye irritation er tightly closed. Store locked	f in eyes: Rinse t and easy to do. on persists: Get up.
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Hazard statement Precautionary statement Prevention Response Storage Disposal Hazard(s) not otherwise classified (HNOC) Supplemental information	Causes serious eye irritation. May cause resp Avoid breathing mist/vapor. Wash thoroughly well-ventilated area. Wear eye protection/face If inhaled: Remove person to fresh air and ke cautiously with water for several minutes. Re Continue rinsing. Call a poison center/doctor medical advice/attention. Store in a well-ventilated place. Keep contain Dispose of contents/container in accordance None known. None.	after handling. Use only outdo e protection. ep comfortable for breathing. I move contact lenses, if presen if you feel unwell. If eye irritation er tightly closed. Store locked with local/regional/national/inte	f in eyes: Rinse t and easy to do. on persists: Get up.
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Citric acid

Other components below reportable levels

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

5 - 10

60 - 80

77-92-9

	4. First-aid measures
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
	5. Fire-fighting measures
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.
	6. Accidental release measures
Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist/vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for	This product is miscible in water.
containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
	7. Handling and storage
Precautions for safe handling	Avoid contact with eyes. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).
	8. Exposure controls/personal protection
Occupational exposure limits	This mixture has no ingredients that have PEL, TLV, or other recommended exposure limit.
Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin protection Hand protection	For prolonged or repeated skin contact use suitable protective gloves.
Other Respiratory protection	Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

AppearancePhysical stateLiquid.FormLiquid.ColorNot available.OdorNot available.OdorNot available.pH6.0 - 6.5Melting point/reczing point<40 °F (< 4.4 °C) estimatedInitial boiling point and boiling>212 °F (> 100 °C) estimatedInitial boiling point and pointNoneEvaporation rateNot available.Flammability (solid, gas)Not available.Flammability (solid, gas)Not available.flammability (imit - upper (%)Not available.flammability (imit - upper (%)Not available.flammability (imit - upper (%)Not available.typor pressure< 1.0 mm Hg estimatedVapor densityNot available.Solubility (water)Son available.solubility (water)Not available.solubility (water)Not available.solubility (water)Not available.solubility (water)CompletePartition coefficientNot available.Vato-quinto temperatureNot available.ViscosityNot available.ViscosityNot available.ViscosityNot available.User pressureNot available.ViscosityNot available.ViscosityNot available.period coefficientNot available.period coefficientNot available.period coefficientNot available.period coefficientNot available.period coefficientNot availab	Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Physical state Liquid. Form Liquid. Color Not available. Odor Not available. Odor Not available. Odor Not available. pH 6.0 - 6.5 Melting point freezing point <40 °F (< 4.4 °C) cestimated range >212 °F (> 100 °C) estimated range None Evaporation rate Not available. None None Evaporation rate Not available. flammability (solid, gas) Not available. flammability (solid, gas) Not available. flammability limit - towper Not available. (%) Not available. flammability limit - towper (%) Not available. Explosive limit - upper (%) Not available. Kiposive limit - upper (%) Not available. Explosive limit - upper (%) Not available. flammability limit - ower (%) Not available. flavito density Not available. fort available. Complete Solubility (water)		· · · · · · · · · · · · · · · · · · ·
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Physical state Liquid. Form Liquid. Color Not available. Odor Not available. Odor threshold Not available. PH 6.0 - 6.5 Melting point/freezing point <40 °F (< 4.4 °C) estimated	Decomposition temperature	Not available.
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Physical stateLiquid.FormLiquid.ColorNot available.OdorNot available.Odor thresholdNot available.pH6.0 - 6.5Melting point/freezing point< 40 °F (< 4.4 °C) estimatedInitial boiling point and boiling> 212 °F (> 100 °C) estimated	Evaporation rate	Not available.
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Physical state Liquid. Form Liquid. Color Not available.	Odor threshold	Not available.
Physical state Liquid. Form Liquid.	Odor	Not available.
Physical state Liquid.	Color	Not available.
	Form	Liquid.
Appearance	Physical state	Liquid.
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Chemical stability

Material is stable under normal conditions.

Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of e	xposure
Inhalation	May cause irritation to the respiratory system.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Causes serious eye irritation.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristics	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation.
Information on toxicological effe	ects
Acute toxicity	Not available.
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory or skin sensitization	I
Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	Not classifiable as to carcinogenicity to humans.
IARC Monographs. Overall B	Evaluation of Carcinogenicity
Not listed. OSHA Specifically Regulate	d Substances (29 CFR 1910.1001-1052)
	gram (NTP) Report on Carcinogens
Not listed. Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
-	May cause respiratory irritation.
Specific target organ toxicity - single exposure	
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not an aspiration hazard.
	12. Ecological information
Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	No data is available on the degradability of any ingredients in the mixture.
Bioaccumulative potential	
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.
	13. Disposal considerations
Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).			
Contaminated packaging		residue, follow label warnings even after container is o an approved waste handling site for recycling or		
	14. Transport informati	on		
DOT				
Not regulated as dangerous ge	pods.			
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not established.			
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not regulated as dangerous goods.			
	15. Regulatory informat	ion		
US federal regulations	This product is a "Hazardous Chemical" as d Standard, 29 CFR 1910.1200.	efined by the OSHA Hazard Communication		
TSCA Section 12(b) Export N	Notification (40 CFR 707, Subpt. D)			
Not regulated. CERCLA Hazardous Substa	nce List (40 CFR 302.4)			
Ammonium citrate dibasic SARA 304 Emergency release				
Not regulated. OSHA Specifically Regulate	d Substances (29 CFR 1910.1001-1052)			
Not regulated.				
Superfund Amendments and Re SARA 302 Extremely hazard Not listed.	authorization Act of 1986 (SARA) ous substance			
SARA 311/312 Hazardous chemical	Yes			
Classified hazard categories	Serious eye damage or eye irritation Specific target organ toxicity (single or repea	ted exposure)		
SARA 313 (TRI reporting) Chemical name	CAS number	% by wt.		
Ammonium citrate dibasic	3012-65-5	20 - 40		
Other federal regulations				
	112 Hazardous Air Pollutants (HAPs) List			
	112(r) Accidental Release Prevention (40 C	FR 68.130)		
Not regulated.	Not regulated			
Safe Drinking Water Act (SDWA)	Not regulated.			
US state regulations				
California Proposition 65				
	Vater and Toxic Enforcement Act of 1986 (Prop by chemicals currently listed as carcinogens or			
International Inventories				
Country(s) or region United States & Puerto Rico	Inventory name Toxic Substances Control Act (TSCA) Invent	On inventory (yes/no)* ory Yes		
	ents of this product comply with the inventory requir components of the product are not listed or exempt	ements administered by the governing country(s) from listing on the inventory administered by the governing		
16. Other information, including date of preparation or last revision				
Issue date	09-14-2018			

Disclaimer

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ChemWorld cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.