SAFETY DATA SHEET

According to OSHA Hazard Communication Standard



SECTION I	DEN	ITIFI	CAT	ON
-----------	-----	-------	-----	----

Product Identifier

COOLER CLEANER
3885/5218/5225/5231
Evaporator Cooler/Mist Nozzle Descalant
Dial Manufacturing Inc.
25 South 51st Avenue, Phoenix, AZ 85403
(602) 278-1100

SECTION II

HAZARD IDENTIFICATION

Classification of Substance or Mixture

Classification according to Regulation (EC) No 1272/2008



GHS05 CORROSIVE



SDS Number: 3885-15

GHS07

H290 - May be corrosive to metals

H314 - Causes severe skin burns and eye damage

H302 – Harmful if swallowed

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Not Applicable

Information concerning particular hazards for human and environment

The product has to be labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

Classification system

--- Continue to Page 2 ---

Date Revised: July 15, 2015 Page 1 of 12

Label elements - Labeling according to Regulation (EC) No 1272/2008

Hazard Pictogram	GHS05 GHS07 CORROSIVE TOXIC	
Single Word	DANGER	
Hazard-determining components of labeling	Urea Hydrochloride	
Hazard statements	H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage.	
Precautionary statements		
P101	If medical advice is needed, have product container or label at hand.	
P102	Keep out of reach of children.	
P103	Read label before use.	
P280	Wear protective gloves/protective clothing/eye protection/face protection.	
P264	Wash thoroughly after handling.	
P260	Do not breathe mist/vapors/spray.	
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.	
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do continue rinsing.	
P310	Immediately call a POISON CENTER or doctor/physician.	
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.	
P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.	
WHMIS-symbols	D1B - Toxic material causing immediate and serious toxic effects D2B - Toxic material causing other toxic effects E - Corrosive material	

-- Continue to Page 3 ---

Date Revised: July 15, 2015 Page 2 of 11

NFPA Rating (Scale 0 - 4)



HMIS Rating (Scale 0 - 4)



Other Hazards

Results of PBT and vPvB PBT: Not applicable assessment vPvB: Not applicable

SECTION III COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization: Mixture

Description: Mixture of substances listed below with nonhazardous additions.

CAS Number	Dangerous Components	%
506-89-8	Urea Monohydrochloride	0 - 15%

SECTION IV FIRST-AID MEASURES

Description of First Aid Measure

General information	a) b)	Immediately remove any clothing soiled by the product. Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
After inhalation	a) b)	Supply fresh air; consult doctor in case of complaints. In case of irregular breathing or respiratory arrest provide artificial respiration
After skin contact	a) b)	Immediately rinse with water. If skin irritation continues, consult a doctor.
After eye contact	a) b)	Remove contact lenses if worn, if possible. Rinse opened eye for several minutes under running water. Then consult a doctor.
After swallowing	a) b)	Rinse out mouth and then drink plenty of water. Do not induce vomiting; call for medical help immediately.

Date Revised: July 15, 2015 Page 3 of 11

Most important symptoms and effects, both acute and delayed

Coughing

Symptoms Breathing difficulty

Dizziness

Gastric or intestinal disorders

Danger of gastric perforation.

Hazards Danger of pulmonary oedema.

Danger of impaired breathing.

Indication of any immediate medical attention and special treatment needed

If necessary oxygen respiration treatment. Medical supervision for at least 48 hours.

SECTION V FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing CO2, powder or water spray. Fight larger fires with water spray

agents or alcohol resistant foam.

Unsuitable extinguishing agents None

Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

Advice for firefighters

Protective equipment Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information Cool endangered receptacles with water spray

SECTION VI ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear protective equipment.

Keep unprotected persons away.

--- Continue to Page 5 ---

Date Revised: July 15, 2015 Page 4 of 11

Ensure adequate ventilation.

Environmental precautions

Inform respective authorities in case of seepage into water course or sewage system. Do not allow to enter sewers/ surface or ground water

Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Clean the affected area carefully; suitable cleaners are:

Warm water

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION VII

HANDLING AND STORAGE

Precautions for safe handling

- a) Ensure good ventilation/exhaustion at the workplace.
- b) Prevent formation of aerosols.
- c) Do not ingest.
- d) Avoid contact with eyes, skin and clothing.
- e) Avoid breathing vapor or mist.

Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles:

- a) Store in a cool location
- b) Avoid storage near extreme heat, ignition sources or open flame.
- c) Don't reuse empty container.
- d) Unsuitable material for receptacle: aluminum.

Information about storage in one common storage facility:

- a) Store away from food.
- b) Store away from oxidizing agents.
- c) Do not store together with alkalis (caustic solutions).

Further information about storage conditions:

- a) Store in cool, dry conditions in well sealed receptacles.
- b) Store receptacle in a well ventilated area.
- c) Keep container tightly sealed.

Date Revised: July 15, 2015 Page 5 of 11

--- Continue to Page 6 ---

Specific end use(s)

None

SECTION VIII

EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical facilities: No further data; see item 7.

Occupational Exposure Limits

OSHA (PEL): Not Established AGCIH (TWA): Not established

Control Parameters

Good general ventilation should be sufficient to control worker exposure to airborne contaminates & fumes.

Ingredients with limit values that require monitoring at the workplace

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Exposure Control

 Keep away from food, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.
Suitable respiratory protective device recommended.For spills, respiratory protection may be advisable
Neoprene, butyl or nitrile rubber glove with cuffs
Chemical splash goggles
Coverall and apron

--- Continue to Page 7 ---

Date Revised: July 15, 2015 Page 6 of 11

SECTION IX

PHSYICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance Form Color	Fluid Blue	
Odor Odor Threshold	Acidic Not Determined	
Change in condition Melting point/Melting range Boiling point/Boiling range	Undetermined 100 °C (212 °F)	
Flash point	Not applicable	
Flammability (solid, gaseous)	Non-Flammable	
Ignition temperature	Not determined	
Decomposition temperature	Not determined	
Auto igniting	Product is not self-lighting	
Danger of explosion	Product does not present an explosion hazard	
Explosion limits Lower Upper	Not determined Not determined	
Vapor pressure	Not determined	
Density Relative density Vapor density Evaporation rate	Not determined 8.59 lbs/gal Not determined (BuAc=1) <.01	
Solubility in/Miscibility with Water	Fully miscible	
Partition coefficient (n-octanol/water)	Not determined	
Viscosity Dynamic Kinematic	Not determined Not determined	
	Continue to Page 8	

Date Revised: July 15, 2015 Page 7 of 11

SECTION X	STABILITY AND REACTIVITY		
Reactivity	No specific test data related to reactivity available for this product or its ingredients		
Chemical stability	Stable		
Conditions to avoid	No specific data		
Possibility of hazardous reacti			
Incompatible materials	Reactive or incompatible with the following materials: oxidizing materials. This material may be extremely hazardous in contact with chlorates and nitrates. Contact with hypochlorites (e.g. Chlorine bleach, sulfides or cyanides) will liberate toxic gases. Contact with alkaline materials (e.g. Aqua ammonia) will generate heat.		

CECTION VI	TOVICOLOCICAL INFORMATION
SECTION XI	TOXICOLOGICAL INFORMATION

Acute Toxicity

Hazardous Ingredient	CAS # LD 50 of Ingredient	
Urea Monohydrochloride	506-89-8	1121 mg/kg - Oral rat

Primary irritant effects

Skin Mild Skin irritant

Eye Corrosive

Carcinogenic categories

IARC (International Agency for Research on Cancer)

None listed

NTP (National Toxicology Program) None listed

OSHA(Occupational Safety & Health Administration)

None listed

Date Revised: July 15, 2015 Page 8 of 11

SECTION XII ECOLOGICAL INFORMATION

Toxicity

Result	Species	Exposure	
Acute LC50 71 mg/l	Ceriodaphnia dubia	48 hours	
Acute LCO > 142 mg/l	Rainbow Trout	96 hours	
Aquatic toxicity No further relevant information available			
ability No further	relevant information avai	lable	
	Acute LC50 71 mg/l Acute LC0 > 142 mg/l No further	Acute LC50 71 mg/l Ceriodaphnia dubia Acute LC0 > 142 mg/l Rainbow Trout No further relevant information avai	

Behavior on the environmental system

Bioaccumulative potential	No further relevant information available
Mobility in soil	No further relevant information available

Additional Ecological information

(General Notes	Biodegradable

Results of PBT and vPvB assessment

PBT	Not applicable	
vPvB	Not applicable	

SECTION XIII

DISPOSAL CONSIDERATIONS

Waste treatment methods (Recommendation)

Biodegradable.

This product has been evaluated for RCRA characteristics and does not meet the criteria for a hazardous waste, if discarded in its purchased form.

Uncleaned packaging (Recommendations)

Neutralize waste fluids with soda ash.

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should 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 empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers.

--- Continue to Page 10 ---

Date Revised: July 15, 2015 Page 9 of 11

SECTION XIV TRANSPORT INFORMATION **UN-Number** DOT, ADR, IMDG, IATA UN2922 UN proper shipping name DOT, IMDG, IATA CORROSIVE LIQUID, TOXIC, N.O.S. (Urea Hydrochloride) **ADR** 2922 CORROSIVE LIQUID, TOXIC, N.O.S. (Urea Hydrochloride) Transport hazard class(es) DOT 8 corrosive substances Class Label 8+6.1 **ADR** Class 8 (CT1) Corrosive substances Label 8+6.1 IMDG, IATA Class 8 corrosive substances Label 8+6.1 Packing group DOT, ADR, MGD, IATA Ш **Environmental hazards** Marine pollutant Special precautions for user Warning: Corrosive substances Danger code (Kemler) 86 **EMS Number** F-A,S-B Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable Transport/Additional information **ADR** 1L Limited quantities (LQ) Transport category Ε Tunnel restriction code UN2922, CORROSIVE LIQUID, TOXIC, N.O.S. (Urea **UN "Model Regulation"** Hydrochloride), 8 (6.1), II --- Continue to Page 11 ---

Date Revised: July 15, 2015 Page 10 of 11

SECTION XV

REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture United States (USA)

SARA

Section 355 (extremely hazardous substances)

Section 313 (Specific toxic chemical listings)

TSCA (Toxic Substances Control Act)

None of the ingredients is listed.

None of the ingredients is listed.

506-89-8 Urea Hydrochloride

Proposition 65 (California)

Chemicals known to cause cancer

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for None of the ingredients is listed.

Females:

Chemicals known to cause reproductive toxicity for males
Chemicals known to cause developmental toxicity

None of the ingredients is listed.
None of the ingredients is listed.

Carcinogenic Categories

EPA (Environmental Protection Agency)

IARC (International Agency for Research on Cancer)

TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

Canada

Canadian Domestic Substances List (DSL)

Canadian Ingredient Disclosure list (limit 0.1%)

Canadian Ingredient Disclosure list (limit 1%)

506-89-8 Urea Hydrochloride

None of the ingredients is listed.

None of the ingredients is listed.

SECTION XVI

OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

R22 Harmful if swallowed.

R34 Causes burns.

R41 Risk of serious damage to eyes.

R52 Harmful to aquatic organisms

Dial Manufacturing Inc. 25 South 51st Avenue, Phoenix, AZ 85403 (602) 278-1100

Date Revised: July 15, 2015 Page 11 of 11