Printing date 08/28/2019 Reviewed on 08/28/2019

1 Identification

· Product identifier

· Trade name: Calibration standard for Full Evaporation Method

· Article number: DOW098

· Restrictions

This chemical/product is not and cannot be distributed in commerce (as defined in section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal. **AQUA**

- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Aqua Solutions, Inc. 6913 Highway 225 DEER PARK, TX 77536 USA800-256-2586

· Information department:

Technical Coordinator

Sherman Nelson sherman@aquasolutions.org

· Emergency telephone number:

Chemtrec: 800-424-9300 Canutec: 613-996-6666

2 Hazard(s) identification

· Classification of the substance or mixture



GHS08 Health hazard

Muta. 1B H340 May cause genetic defects.

Carc. 1B H350 May cause cancer.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

Harmful if swallowed. Acute Tox. 4 H302 Skin Irrit. 2 H315 Causes skin irritation. Eye Irrit. 2A H319

Causes serious eye irritation.

STOT SE 3 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms





GHS07

GHS08

· Signal word Danger

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· Hazard-determining components of labeling:

Dichloromethane (Methylene Chloride)

Naphtha (petroleum), hydrotreated heavy

· Hazard statements

Harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

May cause genetic defects.

May cause cancer.

May cause respiratory irritation. May cause drowsiness or dizziness.

May cause damage to organs through prolonged or repeated exposure.

· Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Call a poison center/doctor if you feel unwell.

Rinse mouth.

If on skin: Wash with plenty of water.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

Get medical advice/attention if you feel unwell.

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 2Fire = 0

Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = *2

Fire = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.

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(Contd. of page 2)

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:		
CAS: 75-09-2	Dichloromethane (Methylene Chloride)	99.69
CAS: 64742-48-9	Naphtha (petroleum), hydrotreated heavy	0.3%
· Table of Nonhazardous Ingredients		
CAS: 79-10-7 Ac	rylic Acid	0.19

4 First-aid measures

- · Description of first aid measures
- · General information:

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: In case of unconsciousness place patient stably in side position for transportation.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: Immediately call a doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Mount respiratory protective device.
- · Environmental precautions: 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.

Ensure adequate ventilation.

· 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.

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· Protective Action Criteria for Chemicals

(Contd. of page 3)

· PAC-1:		
CAS: 75-09-2	Dichloromethane (Methylene Chloride)	200 ppm
CAS: 64742-48-9	Naphtha (petroleum), hydrotreated heavy	350 mg/m³
CAS: 79-10-7	Acrylic Acid	1.5 ppm
· PAC-2:		
CAS: 75-09-2	Dichloromethane (Methylene Chloride)	560 ppm
CAS: 64742-48-9	Naphtha (petroleum), hydrotreated heavy	$1,800 \text{ mg/m}^3$
CAS: 79-10-7	Acrylic Acid	46 ppm
· PAC-3:		
CAS: 75-09-2	Dichloromethane (Methylene Chloride)	6,900 ppm
CAS: 64742-48-9	Naphtha (petroleum), hydrotreated heavy	$40,000 \ mg/m^3$
CAS: 79-10-7	Acrylic Acid	180 ppm

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

- · Information about protection against explosions and fires: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- · Storage
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

CAS: 75-09-2 Dichloromethane (Methylene Chloride)

PEL Short-term value: 125 ppm Long-term value: 25 ppm see 29 CFR 1910.1052 REL See Pocket Guide App. A

TLV Long-term value: 174 mg/m³, 50 ppm

BEI

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· Ingredients with biological limit values:

CAS: 75-09-2 Dichloromethane (Methylene Chloride)

BEI 0.3 mg/L

LD50 Intraperitoneal: urine

Time: end of shift

LD50: Dichloromethane (semi-quantitative)

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

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.

Avoid contact with the eyes and skin.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Liquid
Color: Colorless
Odor: Ether-like

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	(Contd. of pag
Odor threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
Flash point:	Not applicable.
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	605 °C (1,121 °F)
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	13 Vol %
Upper:	22 Vol %
Vapor pressure at 20 °C (68 °F):	453 hPa (339.8 mm Hg)
Density at 20 °C (68 °F):	1.32809 g/cm³ (11.08291 lbs/gal)
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water at 20 °C (68 °F):	20 g/l
Partition coefficient (n-octanol/wate	e r); Not determined.
Viscosity:	
Dynamic at 20 °C (68 °F):	0.43 mPas
Kinematic:	Not determined.
Solvent content:	
Organic solvents:	99.6 %
VOC content:	0.00 %
	0.0 g/l / 0.00 lb/gal
Solids content:	0.1 %
Other information	No further relevant information available.

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

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11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50 values that are relevant for classification:		
ATE (Acute Toxicity Estimate)		exicity Estimate)
Oral	LD50	1,606 mg/kg (rat)
Dermal	LD50	>2,008 mg/kg (rat)

CAS: 75-09-2 Dichloromethane (Methylene Chloride)

Oral | *LD50* | *500 mg/kg (ATE)*

- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Irritant

The product can cause inheritable damage.

· Carcinogenic categories

· IARC (Intern	· IARC (International Agency for Research on Cancer)		
CAS: 75-09-2	Dichloromethane (Methylene Chloride)	2A	
CAS: 79-10-7	Acrylic Acid	3	
· NTP (National Toxicology Program)			
CAS: 75-09-2	Dichloromethane (Methylene Chloride)	R	
· OSHA-Ca (Occupational Safety & Health Administration)			
CAS: 75-09-2	Dichloromethane (Methylene Chloride)		

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

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13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

UN-Number DOT, IMDG, IATA	UN2810
UN proper shipping name DOT IMDG, IATA	Toxic, liquids, organic, n.o.s. (Dichloromethane) TOXIC LIQUID, ORGANIC, N.O.S. (DICHLOROMETHANE)
Transport hazard class(es)	
DOT	
TOXIC 6	
Class	6.1 Toxic substances
Label	6.1
IMDG, IATA	
Class	6.1 Toxic substances
Label	6.1
Packing group DOT, IMDG, IATA	III
Environmental hazards:	Not applicable.
Special precautions for user	Warning: Toxic substances
Transport in bulk according to Annex I MARPOL73/78 and the IBC Code	II of Not applicable.
UN ''Model Regulation'':	UN 2810 TOXIC LIQUID, ORGANIC, N.O.S. (DICHLOROMETHANE), 6.1, III

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15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara
- · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

CAS: 75-09-2 Dichloromethane (Methylene Chloride)

CAS: 79-10-7 Acrylic Acid

· TSCA (Toxic Substances Control Act):

This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.

Dichloromethane (Methylene Chloride)	ACTIVE
Naphtha (petroleum), hydrotreated heavy	ACTIVE
Acrylic Acid	ACTIVE

· Hazardous Air Pollutants

CAS: 75-09-2 Dichloromethane (Methylene Chloride)

CAS: 79-10-7 Acrylic Acid

- · Proposition 65
- · Chemicals known to cause cancer:

CAS: 75-09-2 Dichloromethane (Methylene Chloride)

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- · Carcinogenic categories
- · EPA (Environmental Protection Agency)

 CAS: 75-09-2 | Dichloromethane (Methylene Chloride)
 - · TLV (Threshold Limit Value established by ACGIH)

CAS: 75-09-2 Dichloromethane (Methylene Chloride)

CAS: 79-10-7 Acrylic Acid

A3

· NIOSH-Ca (National Institute for Occupational Safety and Health)

CAS: 75-09-2 Dichloromethane (Methylene Chloride)

- GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms





GHS07 GHS08

· Signal word Danger

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Trade name: Calibration standard for Full Evaporation Method

(Contd. of page 9)

· Hazard-determining components of labeling:

Dichloromethane (Methylene Chloride)

Naphtha (petroleum), hydrotreated heavy

· Hazard statements

Harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

May cause genetic defects.

May cause cancer.

May cause respiratory irritation. May cause drowsiness or dizziness.

May cause damage to organs through prolonged or repeated exposure.

· Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Call a poison center/doctor if you feel unwell.

Rinse mouth.

If on skin: Wash with plenty of water.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

Get medical advice/attention if you feel unwell.

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· National regulations:

· Information about limitation of use:

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 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.

- · Department issuing SDS: Environment protection department.
- · Contact:
- · Date of preparation / last revision

Revsion 0.0, 08-28-2019, Creation date for SDS. STN 08/28/2019 / -

· Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

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DOT: US Department of Transportation IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit BEI: Biological Exposure Limit

Acute Tox. 4: Acute toxicity - Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A

Muta. 1B: Germ cell mutagenicity – Category 1B

Carc. 1B: Carcinogenicity - Category 1B STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2