Safety Data Sheet
acc. to OSHA HCS

Printing date 09/10/2015 Reviewed on 08/18/2015

1 Identification

· **Product identifer**

· **Trade name: MC-ZINC 100**

· **Article number:** W011.X W011.XXXX

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Wasser Corporation
4118 B PL NW, Suite B
Auburn, WA 98001, US
Phone 253-850-2967

· **Information department:** Product safety department
· **Emergency telephone number:**
EMERGENCY PHONE NUMBERS:
USA and Canada: 1-800 424-9300
International: 1-703 527-3887

2 Hazard(s) identification

· **Classification of the substance or mixture**

Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.

Health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Muta. 1B H340 May cause genetic defects.
Carc. 1A H350 May cause cancer.
STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

Skin Sens. 1 H317 May cause an allergic skin reaction.

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

GHS02 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
Solvent naphtha (petroleum), light arom.
4,4'-methylenediphenyl diisocyanate
diphenylmethanediisocyanate,isomeres and homologues
Quartz (SiO2)

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· **Hazard statements**
H225 Highly flammable liquid and vapor.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.
H340 May cause genetic defects.
H350 May cause cancer.
H373 May cause damage to organs through prolonged or repeated exposure.

· **Precautionary statements**
Keep out of reach from children.

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P284	Wear respiratory protection.
P280	Wear protective gloves / eye protection / face protection.
P280	Wear protective gloves.
P240	Ground/bond container and receiving equipment.
P233	Keep container tightly closed.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P272	Contaminated work clothing must not be allowed out of the workplace.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P321	Specific treatment (see on this label).
P342+P311	If experiencing respiratory symptoms: Call a poison center/doctor.
P363	Wash contaminated clothing before reuse.
P304+P341	If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P314	Get medical advice/attention if you feel unwell.
P370+P378	In case of fire: Use for extinction: CO2, powder or water spray.
P405	Store locked up.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

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

Health = 2
Fire = 3
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = *2
Fire = 3
Reactivity = 0

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

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· **vPvB:** Not applicable.

3 Composition/information on ingredients

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

· **Dangerous components:**		
7440-66-6	zinc powder -zinc dust (stabilized)	60-100%%
540-88-5	tert-butyl acetate	5-10%%
1314-13-2	zinc oxide	1-5%%
64742-95-6	Solvent naphtha (petroleum), light arom.	1-5%%
101-68-8	4,4'-methylenediphenyl diisocyanate	1-5%%
9016-87-9	diphenylmethanediisocyanate,isomeres and homologues	1-5%%
1309-37-1	Ferric oxide	1-5%%
14808-60-7	Quartz (SiO2)	0.1-1%%

4 First-aid measures

· **Description of first aid measures**
· **After inhalation:**
Supply fresh air and to be sure call for a doctor.
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.
· **After swallowing:** If symptoms persist consult 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:** CO2, sand, extinguishing powder. Do not use water.
· **For safety reasons unsuitable extinguishing agents:** Water with full jet
· **Special hazards arising from the substance or mixture** No further relevant information available.
· **Advice for firefighters**
· **Protective equipment:** No special measures required.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
· **Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.

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· **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.
Do not flush with water or aqueous cleansing agents
· **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.

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 ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.

· **Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** Store in a cool location.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
· **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:**	
540-88-5 tert-butyl acetate	
PEL	Long-term value: 950 mg/m³, 200 ppm
REL	Long-term value: 950 mg/m³, 200 ppm
TLV	Long-term value: 950 mg/m³, 200 ppm
101-68-8 4,4'-methylenediphenyl diisocyanate	
PEL	Ceiling limit value: 0.2 mg/m³, 0.02 ppm
REL	Long-term value: 0.05 mg/m³, 0.005 ppm Ceiling limit value: 0.2* mg/m³, 0.02* ppm *10-min
TLV	Long-term value: 0.051 mg/m³, 0.005 ppm

· **Additional information:** The lists that were valid during the creation were used as basis.

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· **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.
· **Breathing equipment:**
During mixing, handling and application: Splash goggles. Full protective clothing. Gloves (impervious). Wear suitable respiratory equipment. When air concentrations are not known (or above the TLV), an air-supplied respirator is required. Refer to OSHA Respiratory Protection Standard (29 CFR 1910.134).In presence of air movement, air-purifying (cartridge type) respirators are not the best protection but can be used, if you replaced them frequently. Change cartridges after 8h max or less due to their low warning properties. When in a confined space wear MSHA/NIOSH approved self-contained breathing apparatus or equivalent and full protective gear.
· **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

9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Fluid
Color:	Various colors
· **Odor:**	Aromatic
· **Odour threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	97 °C (207 °F)

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· **Flash point:**	15 °C (59 °F)
· **Flammability (solid, gaseous):**	Not applicable.
· **Ignition temperature:**	
Decomposition temperature:	Not determined.
· **Auto igniting:**	Product is not selfigniting.
· **Danger of explosion:**	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· **Explosion limits:**	
Lower:	Not determined.
Upper:	Not determined.
· **Vapor pressure:**	Not determined.
· **Density at 20 °C (68 °F):**	2.83-3.33 g/cm³ (23.616-27.789 lbs/gal)
· **Relative density**	Not determined.
· **Vapour density**	Not determined.
· **Evaporation rate**	Not determined.
· **Solubility in / Miscibility with**	
Water:	Not miscible or difficult to mix.
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
· **Solvent content:**	
Solids content:	88-92 %
· **Other information**	No further relevant information available.

10 Stability and reactivity

· **Reactivity**
· **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.

11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**		
1314-13-2 zinc oxide		
Oral	LD50	> 5000 mg/kg (rat)

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64742-95-6 Solvent naphtha (petroleum), light arom.		
Oral	LD50	>6800 mg/kg (rat)
Dermal	LD50	>3400 mg/kg (rab)
Inhalative	LC50/4 h	>10.2 mg/l (rat)
101-68-8 4,4'-methylenediphenyl diisocyanate		
Oral	LD50	2200 mg/kg (mouse)
1309-37-1 Ferric oxide		
Oral	LD50	>5000 mg/kg (rat)
64741-65-7 Naphtha (petroleum), heavy alkylate		
Oral	LD50	> 6000 mg/kg (rat)
Dermal	LD50	> 3000 mg/kg (rabbit)
Inhalative	LC50/4 h	> 7.8 mg/l (rat)

· ***Primary irritant effect:***
· ***on the skin:*** *No irritant effect.*
· ***on the eye:*** *No irritating effect.*
· ***Sensitization:***
Sensitization possible through inhalation.
Sensitization possible through skin contact.
· ***Additional toxicological information:***
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
Irritant
Carcinogenic.
The product can cause inheritable damage.

· ***Carcinogenic categories***

· **IARC (International Agency for Research on Cancer)**		
101-68-8	4,4'-methylenediphenyl diisocyanate	3
9016-87-9	diphenylmethanediisocyanate,isomeres and homologues	3
1309-37-1	Ferric oxide	3
14808-60-7	Quartz (SiO2)	1

· **NTP (National Toxicology Program)**		
14808-60-7	Quartz (SiO2)	K

· **OSHA-Ca (Occupational Safety & Health Administration)**
None of the ingredients is listed.

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.*
· ***Ecotoxical effects:***
· ***Remark:*** *Very toxic for fish*

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· **Additional ecological information:**
· **General notes:**
Water hazard class 3 (Self-assessment): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Very toxic for aquatic organisms
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Other adverse effects** No further relevant information available.

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.

14 Transport information

· **UN-Number**	
· **DOT, ADR, IMDG, IATA**	UN1263
· **UN proper shipping name**	
· **DOT**	Paint
· **ADR**	1263 Paint, ENVIRONMENTALLY HAZARDOUS
· **IMDG**	PAINT (zinc powder -zinc dust (stabilized), zinc oxide), MARINE POLLUTANT
· **IATA**	PAINT
· **Transport hazard class(es)**	
· **DOT**	

· **Class**	3 Flammable liquids
· **Label**	3
· **ADR, IMDG**	

· **Class**	3 Flammable liquids

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· **Label**	3
· **IATA**	
	
· **Class**	3 Flammable liquids
· **Label**	3
· **Packing group**	
· **DOT, ADR, IMDG, IATA**	II
· **Environmental hazards:**	Product contains environmentally hazardous substances: zinc powder -zinc dust (stabilized)
· **Marine pollutant:**	Yes Symbol (fish and tree)
· **Special marking (ADR):**	Symbol (fish and tree)
· **Special precautions for user**	Warning: Flammable liquids
· **Danger code (Kemler):**	33
· **EMS Number:**	F-E,S-E
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **DOT**	
· **Quantity limitations**	On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L
· **ADR**	
· **Excepted quantities (EQ)**	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· **IMDG**	
· **Limited quantities (LQ)**	1L
· **Excepted quantities (EQ)**	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· **UN "Model Regulation":**	UN1263, Paint, ENVIRONMENTALLY HAZARDOUS, 3, II

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):**

1314-13-2	zinc oxide
101-68-8	4,4'-methylenediphenyl diisocyanate
9016-87-9	diphenylmethanediisocyanate,isomeres and homologues

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872-50-4	N-methyl-2-pyrrolidone
7439-96-5	manganese

· **TSCA (Toxic Substances Control Act):**

tert-butyl acetate
zinc oxide
Solvent naphtha (petroleum), light arom.
4,4'-methylenediphenyl diisocyanate
diphenylmethanediisocyanate,isomeres and homologues
Ferric oxide

· **Proposition 65**

· **Chemicals known to cause cancer:**

14808-60-7	Quartz (SiO2)

· **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:**

872-50-4	N-methyl-2-pyrrolidone

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

7440-66-6	zinc powder -zinc dust (stabilized)	II
1314-13-2	zinc oxide	D, I, II
101-68-8	4,4'-methylenediphenyl diisocyanate	D, CBD
9016-87-9	diphenylmethanediisocyanate,isomeres and homologues	CBD
7439-96-5	manganese	D

· **TLV (Threshold Limit Value established by ACGIH)**

Ferric oxide	A4
Quartz (SiO2)	A2

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

14808-60-7	Quartz (SiO2)

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

GHS02 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
Solvent naphtha (petroleum), light arom.
4,4'-methylenediphenyl diisocyanate
diphenylmethanediisocyanate,isomeres and homologues
Quartz (SiO2)

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· **Hazard statements**
H225 Highly flammable liquid and vapor.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.
H340 May cause genetic defects.
H350 May cause cancer.
H373 May cause damage to organs through prolonged or repeated exposure.

· **Precautionary statements**

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P284	Wear respiratory protection.
P280	Wear protective gloves / eye protection / face protection.
P280	Wear protective gloves.
P240	Ground/bond container and receiving equipment.
P233	Keep container tightly closed.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P272	Contaminated work clothing must not be allowed out of the workplace.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P321	Specific treatment (see on this label).
P342+P311	If experiencing respiratory symptoms: Call a poison center/doctor.
P363	Wash contaminated clothing before reuse.
P304+P341	If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P314	Get medical advice/attention if you feel unwell.
P370+P378	In case of fire: Use for extinction: CO2, powder or water spray.
P405	Store locked up.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	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:** Product safety department
· **Contact:** HS REG.DEPART.REG.SS
· **Date of preparation / last revision** 09/10/2015 / -
· **Abbreviations and acronyms:**
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
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
Flam. Liq. 2: Flammable liquids, Hazard Category 2
Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
Muta. 1B: Germ cell mutagenicity, Hazard Category 1B
Carc. 1A: Carcinogenicity, Hazard Category 1A
STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2