Printing date 09/09/2015 Reviewed on 08/24/2015

### 1 Identification

· Product identifer

· Trade name: MC-PREPBOND 100

· Article number: W051.81

· 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



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.

Carc. 2 H351 Suspected of causing cancer.

Repr. 1B H360 May damage fertility or the unborn child.

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



Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

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

STOT SE 3 H335 May cause respiratory irritation.

- · Label elements
- · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms







GHS07

· Signal word Danger

· Hazard-determining components of labeling:

4,4'-methylenediphenyl diisocyanate diphenylmethanediisocyanate,isomeres and homologues o-(p-isocyanatobenzyl)phenyl isocyanate

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Solvent naphtha (petroleum), light arom.

#### · Hazard statements

H225 Highly flammable liquid and vapor.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

H360 May damage fertility or the unborn child.

H335 May cause respiratory irritation.

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.
D280	Wagn and protection / face protection

*P280* Wear eye protection / face protection.

P240 Ground/bond container and receiving equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

*P264 Wash thoroughly after handling.* 

P271 Use only outdoors or in a well-ventilated area.

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.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

*P321* Specific treatment (see on this label).

P342+P311 If experiencing respiratory symptoms: Call a poison center/doctor.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

breathing.

P312 Call a poison center/doctor if you feel unwell. P363 Wash contaminated clothing before reuse.

P308+P313 IF exposed or concerned: Get medical advice/attention.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: 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. P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

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 = 3Reactivity = 0

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# Safety Data Sheet acc. to OSHA HCS

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Trade name: MC-PREPBOND 100

· HMIS-ratings (scale 0 - 4)

HEALTH \*2 Health = \*2 Fire = 3 REACTIVITY 0 Reactivity = 0

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

## 3 Composition/information on ingredients

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

· Dangerous components:		
540-88-5	tert-butyl acetate	
101-68-8	4,4'-methylenediphenyl diisocyanate	10-30%%
7429-90-5	aluminium powder (stabilised)	10-30%%
9016-87-9	diphenylmethanediisocyanate,isomeres and homologues	10-30%%
64742-95-6	Solvent naphtha (petroleum), light arom.	5-10%%
	o-(p-isocyanatobenzyl)phenyl isocyanate	1-5%%
872-50-4	N-methyl-2-pyrrolidone	0.1-1%%

### 4 First-aid measures

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

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· 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. If symptoms persist, consult a doctor.

- · 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.

US

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## 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.

· 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.

Prevent formation of aerosols.

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · 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 value	s that require moni	toring 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
	Long-term value: $0.05 \text{ mg/m}^3$ , $0.005 \text{ ppm}$ Ceiling limit value: $0.2* \text{ mg/m}^3$ , $0.02* \text{ ppm}$
	*10-min

TLV Long-term value: 0.051 mg/m³, 0.005 ppm

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

WEEL Long-term value: 10 ppm

Skin

### · Ingredients with biological limit values:

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

BEI 100 mg/L

Medium: urine Time: end of shift

Parameter: 5-Hydroxy-N-methyl-2-pyrrolidone

- · 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.

Avoid contact with the eyes and skin.

### · 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

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Physical and chemical proper	ties
Information on basic physical and c	chemical properties
· General Information	
· Appearance:	
Form:	Fluid
Color:	Silver-colored
· Odor: · Odour threshold:	Aromatic Not determined.
pH-value:	Not determined.
· Change in condition	The factor markets
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	97 °C (207 °F)
Flash point:	15 °C (59 °F)
Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	400 °C (752 °F)
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapmixtures are possible.
Explosion limits:	
Lower:	0.4 Vol %
Upper:	Not determined.
Vapor pressure at 20 °C (68 °F):	41 hPa (31 mm Hg)
Density at 20 °C (68 °F):	1.09-1.12 g/cm³ (9.096-9.346 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/wate	e <b>r):</b> Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent content:	
Solids content:	69-73 %
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.

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## 11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50	values that	are relevant for classification:	
		lenediphenyl diisocyanate	
Oral	LD50	2200 mg/kg (mouse)	
64742-95-	6 Solvent n	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)	
64741-65-	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: Irritant to skin and mucous membranes.
- · on the eye: 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 categories

· IARC (Inte	rnational Agency for Research on Cancer)	
101-68-8	4,4'-methylenediphenyl diisocyanate	3
9016-87-9	diphenylmethanediisocyanate,isomeres and homologues	3
· NTP (Natio	onal Toxicology Program)	
None of the	ingredients is listed.	
· 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: Harmful to fish
- · 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.

Harmful to aquatic organisms

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- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable. · **vPvB**: Not applicable.
- $\cdot \textit{Other adverse effects} \ \textit{No further relevant information available}.$

## 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.

Transport information	
· UN-Number · DOT, ADR, IMDG, IATA	UN1263
· UN proper shipping name	
· DOT	Paint
$\cdot ADR$	1263 Paint
· IMDG, IATA	PAINT
· Transport hazard class(es)	
· DOT	
FLAMMABLE LIQUID	
3	
· Class	3 Flammable liquids
· Label	3
· ADR, IMDG, IATA	
· Class	3 Flammable liquids
· Label	3
· Packing group	
· DOT, ADR, IMDG, IATA	II
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Warning: Flammable liquids
· Danger code (Kemler):	30
· EMS Number:	F-E, <u>S-E</u>
· Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.
· Transport/Additional information:	
· DOT	
· Quantity limitations	On passenger aircraft/rail: 1 L
-	On cargo aircraft only: 5 L

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	(Contd. of pa
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)	500 ml
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, 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):

101-68-8 4,4'-methylenediphenyl diisocyanate

9016-87-9 diphenylmethanediisocyanate,isomeres and homologues

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

## · TSCA (Toxic Substances Control Act):

tert-butyl acetate

4,4'-methylenediphenyl diisocyanate

diphenylmethanediisocyanate,isomeres and homologues

Solvent naphtha (petroleum), light arom.

o-(p-isocyanatobenzyl)phenyl isocyanate

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

None of the ingredients is listed.

· 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

$\cdot$ <b>EPA</b>	(Environmental	Protection Agency	)
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101-68-8	4,4'-methylenediphenyl diisocyanate	D, CBD
9016-87-9	diphenylmethanediisocyanate,isomeres and homologues	CBD

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

None of the ingredients is listed.

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

None of the ingredients is listed.

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

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### · Hazard pictograms







GHS02 GHS07

#### · Signal word Danger

#### · Hazard-determining components of labeling:

4,4'-methylenediphenyl diisocyanate

diphenylmethanediisocyanate,isomeres and homologues

o-(p-isocyanatobenzyl)phenyl isocyanate

Solvent naphtha (petroleum), light arom.

#### · Hazard statements

H225 Highly flammable liquid and vapor.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

H360 May damage fertility or the unborn child.

H335 May cause respiratory irritation.

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

#### · Precautionary statements

P321

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.
P280	Wear eye protection / face protection.
P240	Ground/bond container and receiving equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing must not be allowed out of the workplace
P201	Obtain special instructions before use.

P201 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.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Specific treatment (see on this label).

P342+P311 If experiencing respiratory symptoms: Call a poison center/doctor.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

breathing.

P312 Call a poison center/doctor if you feel unwell. P363 Wash contaminated clothing before reuse. P308+P313 IF exposed or concerned: Get medical advice/attention.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P337+P313 If eye irritation persists: 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. P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

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P403+P235 Store in a well-ventilated place. Keep cool.

Dispose of contents/container in accordance with local/regional/national/international P501

regulations.

· 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 09/09/2015 / -
- · 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

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

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

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

Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1 Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Carc. 2: Carcinogenicity, Hazard Category 2

Repr. 1B: Reproductive toxicity, Hazard Category 1B

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2