Harwell Brothers™

Conquering the War on Rust!™

2823

Moisture Cure Urethane
100 Gloss Finish

Safety Data Sheets

1 Identifier

Product identifier
Trade name: Moisture Cure Urethane Finish 100 Gloss
Article number: Harwell Brothers 2823 100 Gloss Details of the supplier of the safety data sheet Manufacturer/ Supplier:
Harwell Brothers Distribution LLC
770 E. Main St.
Lehi Utah, 84043
Phone 310 744 3325
Information department: Product safety department
Emergency telephone number:
EMERGENCY PHONE NUMBERS:
USA 1-800 400-2361

2 Hazards Identification

Classification of the substance or mixture

Flame
GHS02
Flam. Liq. 2 *H225 Highly flammable liquid and vapor.*

Skull and crossbones
GHS06
Acute Tox. 3 *H331 Toxic if inhaled.*

Health Hazarded
GHS08

Resp. Sens. 1 *H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.*
Muta. 1B *H340 May cause genetic defects.*
Carc. 1B *H350 May cause cancer.*
Repr. 1BH360 *May damage fertility or the unborn child.*

Harmful
GHS07
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 GHS06 GHS07 GHS08
Signal word Danger
Hazard-determining components of labeling:
Hexane, 1,6-diisocyanato-, homopolymer titanium dioxide
Stoddard solventbis(2-ethylhexyl) phthalate
Hazard statements
H225 Highly flammable liquid and vapor
H331 Toxic if inhaled.
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.
H360 May damage fertility or the unborn child.
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.
P284 Wear respiratory protection.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray
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.
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 start 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 off
P321 Specific treatment (see on this label).

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
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.
P370+P378 In case of fire: Use for extinction: CO2, powder, or water spray.
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

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

Health = 3
Fire= 3
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

*Health = *3*
Fire= 3
Reactivity = 0

Other hazards

Results of PBT and vPvB assessment

· **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	10-30%%
13463-67-7	titanium dioxide	10-30%%
53880-05-0	Homopolymer of IPDI	1-5%%
28182-81-2	Hexane, 1,6-diisocyanato-, homopolymer	1-5%%
110-43-0	methyl amyl ketone	1-5%%
7429-90-5	aluminum powder (stabilized) in silver color	1-5%%
8052-41-3	Stoddard solvent	1-5%%
64742-95-6	Solvent naphtha (petroleum), light aroma.	1-5%%
117-81-7	bis(2-ethylhexyl) phthalate	1-5%%
4098-71-9	isophorone di-isocyanate	1-5%%
95-63-6	1,2,4-trimethylbenzene	1-5%%
1333-86-4	Carbon black in dark, grey, or dark colors	0.1-1%%
64741-65-7	Naphtha (petroleum), heavy alkylate	0.1-1%%

4 First Aid

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.
After skin contact:
Immediately wash with water, 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

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: *Mouth respiratory protective device*

6 Accidental Release

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 does 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. Open and handle receptacle with care Prevent formation of aerosols.
Information about protection against explosions and fires:
Keep ignition sources away from product. 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
110-43-0 methyl amyl ketone	
PEL	Long-term value: 465 mg/m³, 100 ppm
REL	Long-term value: 465 mg/m³, 100 ppm
TLV	Long-term value: 233 mg/m³, 50 ppm
8052-41-3 Stoddard solvent	
PEL	Long-term value: 2900 mg/m³, 500 ppm
REL	Long-term value: 350 mg/m³ Ceiling limit value: 1800* mg/m³ *15-min
TLV	Long-term value: 525 mg/m³, 100 ppm
117-81-7 bis(2-ethylhexyl) phthalate	
PEL	Long-term value: 5 mg/m³
REL	Short-term value: 10 mg/m³ Long-term value: 5 mg/m³ See Pocket Guide App. A
TLV	Long-term value: 5 mg/m³
4098-71-9 isophorone di-isocyanate	
REL	Short-term value: 0.18 mg/m³, 0.02 ppm Long-term value: 0.045 mg/m³, 0.005 ppm Skin
TLV	Long-term value: 0.045 mg/m³, 0.005 ppm
95-63-6 1,2,4-trimethylbenzene	
REL	Long-term value: 125 mg/m³, 25 ppm
TLV	Long-term value: 123 mg/m³, 25 ppm

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.
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 must be resistant product. Due to not having test data, no recommendation to the type of glove can be given for the product. Selection of the glove material should be done on bases of the chemical make-up of the product. Material of the glove by selection of the glove dose not only depend on material, on the quality varies from manufacture to manufacture. This should be done by glove manufacture.*

Eye Protection:

Tightly sealed Googles

9 Physical and Chemical Properties

· ***Information on basic physical and chemical properties***	
· ***General Information*** · ***Appearance:***	
Form:	*Fluid*
Color:	*Assorted colors*
· ***Odor:***	*Aromatic*
· ***Odor threshold:***	*Not determined.*
· ***pH-value:***	*Not determined.*
· ***Change in condition***	
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:***	
Decomposition temperature:	*Not determined.*
· ***Auto igniting:***	*Product is not self-igniting.*
· ***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 at 20 °C (68 °F):***	*41 hPa (31 mm Hg)*
· ***Density at 20 °C (68 °F):***	*1.11-1.32 g/cm³ (9.263-11.015 lbs./gal)*
· ***Relative density*** *Not determined.* · ***Vapor density*** *Not determined.* · ***Evaporation rate*** *Not determined.*	
· ***Solubility in / Miscibility with***	
Water:	*Not miscible or difficult to mix.*

· **Viscosity:**
Dynamic: Not determined. **Kinematic:** Not determined.

· **Solvent content:**

Solids content: 67-73.0 %
· **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.

11 Toxicity

Information on toxicological effects ·
Acute toxicity:

· **LD/LC50 values that are relevant for classification:**		
64742-95-6 Solvent naphtha (petroleum), light aroma.		
Oral	LD50	>6800 mg/kg (rat)
Dermal	LD50	>3400 mg/kg (rab)
Inhalative	LC50/4 h	>10.2 mg/l (rat)
117-81-7 bis(2-ethylhexyl) phthalate		
Oral	LD50	30600 mg/kg (rat)
Dermal	LD50	25000 mg/kg (rabbit)
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, and Carcinogenic. The product can cause inheritable damage.

Carcinogenic categories

· ***IARC (International Agency for Research on Cancer)***		
13463-67-7	*titanium dioxide*	*2B*
117-81-7	*bis(2-ethylhexyl) phthalate*	*2B*
7631-86-9	*silicon dioxide, chemically prepared*	*3*
1333-86-4	*Carbon black*	*2B*
1330-20-7	*xylene*	*3*
14808-60-7	*Quartz (SiO2)*	*1*
111-76-2	*2-butoxyethanol*	*3*
100-41-4	*ethylbenzene*	*2B*
· ***NTP (National Toxicology Program)***		
117-81-7	*bis(2-ethylhexyl) phthalate*	*R*
14808-60-7	*Quartz (SiO2)*	*K*
· ***OSHA-Ca (Occupational Safety & Health Administration)***		
None of the ingredients is listed.		
· ***NTP (National Toxicology Program)***		
117-81-7	*bis(2-ethylhexyl) phthalate*	*R*
14808-60-7	*Quartz (SiO2)*	*K*
· ***OSHA-Ca (Occupational Safety & Health Administration)***		
None of the ingredients is listed.		

12 Ecological

Toxicity
Aquatic toxicity: *No further relevant information available.*
Persistence and degradability *No further relevant information available.*
Behavior in environmental systems:
Bio accumulative potential *No further relevant information available.*
Mobility in soil *No further relevant information available.*
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.
Results of PBT and vPvB assessment
PBT: *Not applicable.*
vPvB: *Not applicable.*
Other adverse effects *No further relevant information available.*

13 Disposal recommendations

Waste treatment methods
Recommendation: *Must not be disposed of together with household garbage. Do not allow product to reach sewage system ·*

Uncleaned packaging's:
Recommendation: *Disposal must be made according to official regulations*

14 Transportation

· ***UN-Number***	
· ***DOT, ADR, IMDG, IATA***	*UN1263*
· ***UN proper shipping name***	
· ***DOT***	*Paint*
· ***ADR***	*1263 Paint*
· ***IMDG, IATA***	*PAINT*
· ***Transport hazard class(es)*** **DOT**	
	
· ***Class Label***	*3 Flammable liquids*
· ***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):***	*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, 3, II

15 Regulatory

Safety, health, and environmental regulations/legislation specific for the substance or mixture · **Sara**

· **Section 355 (extremely hazardous substances):**	
4098-71-9	isophorone di-isocyanate
· **Section 313 (Specific toxic chemical listings):**	
117-81-7	bis(2-ethylhexyl) phthalate
4098-71-9	isophorone di-isocyanate
95-63-6	1,2,4-trimethylbenzene
1330-20-7	xylene
872-50-4	N-methyl-2-pyrrolidone
822-06-0	hexamethylene-di-isocyanate
111-76-2	2-butoxyethanol
100-41-4	ethylbenzene
· **TSCA (Toxic Substances Control Act):**	
tert-butyl acetate	
titanium dioxide	
Homopolymer of IPDI	
Hexane, 1,6-diisocyanato-, homopolymer	
methyl amyl ketone	
Stoddard solvent	
Solvent naphtha (petroleum), light aroma.	
bis(2-ethylhexyl) phthalate	
silicon dioxide, chemically prepared	
isophorone di-isocyanate	
1,2,4-trimethylbenzene	

· **Proposition 65**

· **Chemicals known to cause cancer:**	
13463-67-7	titanium dioxide
117-81-7	bis(2-ethylhexyl) phthalate

1333-86-4	Carbon black
14808-60-7	Quartz (SiO2)
100-41-4	ethylbenzene
· **Chemicals known to cause reproductive toxicity for females:**	
None of the ingredients is listed.	
· **Chemicals known to cause reproductive toxicity for males:**	
117-81-7	bis(2-ethylhexyl) phthalate
· **Chemicals known to cause developmental toxicity:**	
117-81-7	bis(2-ethylhexyl) phthalate
872-50-4	N-methyl-2-pyrrolidone

Carcinogenic categories

· **EPA (Environmental Protection Agency)**		
117-81-7	bis(2-ethylhexyl) phthalate	B2
1330-20-7	xylene	I
111-76-2	2-butoxyethanol	NL
100-41-4	ethylbenzene	D
· **TLV (Threshold Limit Value established by ACGIH)**		
titanium dioxide		A4
bis(2-ethylhexyl) phthalate		A3
Carbon black		A4
xylene		A4
zirconium dioxide		A4
· **NIOSH-Ca (National Institute for Occupational Safety and Health)**		
13463-67-7	titanium dioxide	
117-81-7	bis(2-ethylhexyl) phthalate	
1333-86-4	Carbon black	
14808-60-7	Quartz (SiO2)	

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

Hazard pictogram

GHS02

GHS08

GHS07

GHS06

Signal word *Danger*

Hazard-determining components of labeling:
Hexane, 1,6-diisocyanato-, homopolymer titanium dioxide Stoddard solventbis(2-ethylhexyl) phthalate

Hazard statements

H225 *Highly flammable liquid and vapor.*
H331 *Toxic if inhaled.*
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.*
H360 *May damage fertility or the unborn child*

Precautionary statements

P210 *Keep away from heat/sparks/open flames/hot surfaces. - No smoking.*
P241 *Use explosion-proof electrical/ventilating/lighting/equipment.*
P284 *Wear respiratory protection.*
P261 *Avoid breathing dust/fume/gas/mist/vapors/spray 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.*
P271 *Use only outdoors or in a well-ventilated area.*
P272 *Contaminated work clothing remain at workplace.*
P201 *Obtain special instructions before use.*
P202 *Do not start until all safety precautions (personal) have analyzed, read, and understood.*
P303+P361+P353 *IF ON SKIN (or hair): Remove/Take off immediately al contaminated clothing*
P321 *Specific treatment (see on this label).*
P304+P340 *If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for Breathing*
P363 *Wash contaminated clothing before reuse.*
P308+P313 *If exposed or concerned: Get medical advice*
P333+P313 *If skin irritation or rash occurs: Get medical advice/attention.*

P370+P378 *In case of fire: Use for extinction: CO2, powder, or water spray.*
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*

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 accommodated by the authorities in certain cases.

Chemical safety assessment:

A Chemical Safety Assessment has not been conducted, work my not proceed

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 / lastrevision*05/28/2022*

Abbreviations and acronyms:

ADR: Accord European sur le transport des merchandises danger uses 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

Acute Tox. 3: Acute toxicity, Hazard Category 3

Resp. Sens. 1: Sensitization - Respiratory., Hazard Category 1

Skin Sens. 1: Sensitization - Skin, Hazard Category 1

Muta. 1B: Germ cell mutagenicity, Hazard Category 1B

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