Harwell Brothers™

Conquering the War on Rust!™

2833

Moisture Cure Urethane 100 Semi-Gloss Finish

Safety Data Sheets

1 Identifier

Product identifier

Trade name: Moisture Cure Urethane Finish 100 Semi-Gloss

Article number: Harwell Brothers 2833 100 Semi-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

Flammable Liquid 2 H225 Highly flammable liquid and vapor.

Harmful

GHS07

Skin Sensitivity 1 H317 May cause an allergic skin reaction

Health Hazard

GHS08

Resp. Sensitivity 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Metabolic 1B H340 May cause genetic defects.
Carcinogen 1B H350 May cause cancer

Label elements

GHS label elements:

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

Hazard pictograms

GHS02 GHS07 GHS08

Signal word Danger

Hazard-determining components of labeling:

Hexane, 1,6-diisocyanato-, homopolymer titanium dioxide
Stoddard solvent is (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*

Printing date 08/01/2022 ***Printing date 08/01/2022***

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 in white, pastel, or grey colors	10-30%
28182-81-2	Hexane, 1,6-diisocyanato-, homopolymer	1-5%
7429-90-5	Aluminum powder (stabilized) in silver color	1-5%
8052-41-3	Stoddard solvent	1-5%
53880-05-0	Homopolymer of IPDI	1-5%
110-43-0	Methyl amyl ketone	1-5%
64742-95-6	Solvent naphtha (petroleum), light aroma.	1-5%
1333-86-4	Carbon black in dark, grey colors	0.1-1%
4098-71-9	Isophorone diisocyanate	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.*

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.

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. Currently, the other constituents have no known exposure limits.

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	*Short-term value: 712 mg/m³, 150 ppm Long-term value: 238 mg/m³, 50 ppm*
7429-90-5 Aluminum powder (stabilized)	
PEL	*Long-term value: 15*; 5** mg/m³ *Total dust; ** Respirable fraction*
REL	*Long-term value: 10* 5** mg/m³ as Al*Total dust**Respirable/pyro powder./welding fumes*
TLV	*Long-term value: 1* mg/m³ as Al; *as respirable fraction*

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
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
1333-86-4 Carbon black	
PEL	Long-term value: 3.5 mg/m³
REL	Long-term value: 3.5* mg/m³ *0.1 in presence of PAHs; See Pocket Guide Apps. A+C
TLV	Long-term value: 3* mg/m³ *inhalable fraction
4098-71-9 Isophorone diisocyanate	
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

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.
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)
Partition coefficient (n-octanol/water): Not determined	
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.
VOC content:	100g/l / 0.83lb/gal
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	>6,800 mg/kg (rat)
Dermal	LD50	>3,400 mg/kg (rabbit.)
Inhalation	LC50/4 h	>10.2 mg/l (rat)
64741-65-7 Naphtha (petroleum), heavy alkylate		
Oral	LD50	>6,000 mg/kg (rat)
Dermal	LD50	>3,000 mg/kg (rabbit)
Inhalation	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:
This product may cause cancer.
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
Irritant

Carcinogenic categories

IARC (International Agency for Research on Cancer)		
13463-67-7	titanium dioxide	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
NTP (National Toxicology Program)		
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.*

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 diisocyanate*
· ***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
Hexane, 1,6-diisocyanato-, homopolymer
Stoddard solvent
Homopolymer of IPDI
methyl amyl ketone
Solvent naphtha (petroleum), light aroma.
silicon dioxide, chemically prepared

· **TSCA new (21st Century Act) (Substances not listed)**	
7429-90-5	aluminum powder (stabilized)
53880-05-0	Homopolymer of IPDI

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

GHS07

GHS08

Signal word *Danger*

Hazard-determining components of labeling:
Titanium dioxide
Hexane, 1,6-diisocyanato-, homopolymer
Naphtha (petroleum), heavy alkylate Isophorone di-isocyanate

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.*
H350 *May cause cancer.*

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