

1 Identification

- **Product identifier**
- **Trade name:** Dual Cure 183 Semi Gloss DTM Blacks
- **Article number:** 183BXXX
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Baril Coatings USA, LLC
401 Growth Parkway
Angola, IN 46703
- **Information department:** Product safety department
- **Emergency telephone number:** During normal opening times: +1 (260) 665-8431

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

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



GHS08 Health hazard

Carc. 1A H350 May cause cancer.



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



GHS07



GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**

tetraethyl-N,N'-(methylenedicyclohexane-4,1-diyl)bis-DL-aspartate

Carbon black

Quartz (SiO₂)

Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate

Trade name: Dual Cure 183 Semi Gloss DTM Blacks

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Hazard statements

Highly flammable liquid and vapor.
May cause an allergic skin reaction.
May cause cancer.

Precautionary statements

If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/fume/gas/mist/vapors/spray
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
If exposed or concerned: Get medical advice/attention.
Specific treatment (see on this label).
If skin irritation or rash occurs: Get medical advice/attention.
Wash contaminated clothing before reuse.
In case of fire: Use for extinction: CO₂, powder or water spray.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

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

Health = 1
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.
- vPvB:** Not applicable.

3 Composition/information on ingredients**Chemical characterization: Mixtures**

Description: Hazardous substances listed below.

Dangerous components:

7727-43-7	barium sulphate, natural	>25-≤50%
136210-30-5	tetraethyl-N,N'-(methylenediclohexane-4,1-diyl)bis-DL-aspartate	>10-≤25%
628-63-7	pentyl acetate	>2.5-≤10%

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79-20-9	methyl acetate	>2.5-<10%
108-65-6	2-methoxy-1-methylethyl acetate	>2.5-≤10%
624-41-9	2-methylbutyl acetat	>2.5-≤10%
1333-86-4	Carbon black	>2.5-≤10%
112926-00-8	amorphous silica (silica gel, precipitated silica)	≤2.5%
14808-60-7	Quartz (SiO ₂)	0.1-≤2.5%
41556-26-7	Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	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. Then 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, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **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.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
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.

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· Protective Action Criteria for Chemicals**· PAC-1:**

7727-43-7	barium sulphate, natural	15 mg/m ³
628-63-7	pentyl acetate	100 ppm
79-20-9	methyl acetate	250 ppm
108-65-6	2-methoxy-1-methylethyl acetate	50 ppm
7779-90-0	trizinc bis(orthophosphate)	12 mg/m ³
1314-13-2	zinc oxide	10 mg/m ³
1333-86-4	Carbon black	9 mg/m ³
112926-00-8	amorphous silica (silica gel, precipitated silica)	18 mg/m ³
14808-60-7	Quartz (SiO ₂)	0.075 mg/m ³
9002-88-4	Polyethylene low density	16 mg/m ³
123-86-4	n-butyl acetate	5 ppm

· PAC-2:

7727-43-7	barium sulphate, natural	170 mg/m ³
628-63-7	pentyl acetate	670 ppm
79-20-9	methyl acetate	1,700 ppm
108-65-6	2-methoxy-1-methylethyl acetate	1,000 ppm
7779-90-0	trizinc bis(orthophosphate)	36 mg/m ³
1314-13-2	zinc oxide	15 mg/m ³
1333-86-4	Carbon black	99 mg/m ³
112926-00-8	amorphous silica (silica gel, precipitated silica)	200 mg/m ³
14808-60-7	Quartz (SiO ₂)	33 mg/m ³
9002-88-4	Polyethylene low density	170 mg/m ³
123-86-4	n-butyl acetate	200 ppm

· PAC-3:

7727-43-7	barium sulphate, natural	990 mg/m ³
628-63-7	pentyl acetate	4000* ppm
79-20-9	methyl acetate	10000* ppm
108-65-6	2-methoxy-1-methylethyl acetate	5000* ppm
7779-90-0	trizinc bis(orthophosphate)	220 mg/m ³
1314-13-2	zinc oxide	2,500 mg/m ³
1333-86-4	Carbon black	590 mg/m ³
112926-00-8	amorphous silica (silica gel, precipitated silica)	1,200 mg/m ³
14808-60-7	Quartz (SiO ₂)	200 mg/m ³
9002-88-4	Polyethylene low density	1,000 mg/m ³
123-86-4	n-butyl acetate	3000* ppm

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.

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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 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.
At this time, the other constituents have no known exposure limits.

7727-43-7 barium sulphate, natural

PEL	Long-term value: 15* 5** mg/m ³ *total dust **respirable fraction
REL	Long-term value: 10* 5** mg/m ³ *total dust **respirable fraction
TLV	Long-term value: 5* mg/m ³ *inhalable fraction; E

628-63-7 pentyl acetate

PEL	Long-term value: 525 mg/m ³ , 100 ppm
REL	Long-term value: 525 mg/m ³ , 100 ppm
TLV	Short-term value: 532 mg/m ³ , 100 ppm Long-term value: 266 mg/m ³ , 50 ppm

79-20-9 methyl acetate

PEL	Long-term value: 610 mg/m ³ , 200 ppm
REL	Short-term value: 760 mg/m ³ , 250 ppm Long-term value: 610 mg/m ³ , 200 ppm
TLV	Short-term value: 757 mg/m ³ , 250 ppm Long-term value: 606 mg/m ³ , 200 ppm

108-65-6 2-methoxy-1-methylethyl acetate

WEEL	Long-term value: 50 ppm
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624-41-9 2-methylbutyl acetat

TLV	Short-term value: 532 mg/m ³ , 100 ppm Long-term value: 266 mg/m ³ , 50 ppm
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1333-86-4 Carbon black

PEL	Long-term value: 3.5 mg/m ³
REL	Long-term value: 3.5* mg/m ³ *0.1 in presence of PAHs; See Pocket Guide Apps.A+C
TLV	Long-term value: 3* mg/m ³ *inhalable fraction

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112926-00-8 amorphous silica (silica gel, precipitated silica)

PEL	20mppcf or 80mg/m ³ /%SiO ₂
REL	Long-term value: 6 mg/m ³ See Pocket Guide App. C
TLV	TLV withdrawn

14808-60-7 Quartz (SiO₂)

PEL	Long-term value: 0.05* mg/m ³ *resp. dust; 30mg/m ³ /%SiO ₂ +2
REL	Long-term value: 0.05* mg/m ³ *respirable dust; See Pocket Guide App. A
TLV	Long-term value: 0.025* mg/m ³ *as respirable fraction

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

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

· **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

US

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9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Liquid
Color:	Black
Odor:	Solvent-like
Odor threshold:	Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	57 °C (134.6 °F)

· Flash point: 10 °C (50 °F)

· Flammability (solid, gaseous): Not applicable.

· Ignition temperature: 315 °C (599 °F)

· 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): 1.52 g/cm³ (12.68 lbs/gal)

· Relative density: Not determined.

· Vapor density: Not determined.

· Evaporation rate: Not determined.

· Solubility in / Miscibility with

Water: Miscible

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic:	Not determined.
Kinematic:	Not determined.

· Solvent content:

Organic solvents:	18.3 %
VOC content:	18.34 %
	278.8 g/l / 2.33 lb/gal

· Solids content: 74.3 % (by weight)

· Other information: No further relevant information available.

10 Stability and reactivity

· Reactivity No further relevant information available.

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- **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:**

7779-90-0 trizinc bis(orthophosphate)

Oral | LD50 | >5,000 mg/kg (rat)

1314-13-2 zinc oxide

Oral | LD50 | >5,000 mg/kg (rat)

- **Primary irritant effect:**

- **on the skin:** No irritant effect.

- **on the eye:** No irritating effect.

- **Sensitization:** Sensitization possible through skin contact.

- **Additional toxicological information:**

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

Irritant

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

1333-86-4 | Carbon black

2B

14808-60-7 | Quartz (SiO₂)

1

9002-88-4 | Polyethylene low density

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 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.

- **Ecotoxicological effects:**

- **Remark:** Toxic for fish

- **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.

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*Danger to drinking water if even small quantities leak into the ground.**Also poisonous for fish and plankton in water bodies.**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, IMDG, IATA**

UN1263

· UN proper shipping name**· DOT**

Paint

· IMDG

PAINT (trizinc bis(orthophosphate), zinc oxide), MARINE POLLUTANT

· IATA

PAINT

· Transport hazard class(es)**· DOT****· Class**

3 Flammable liquids

· Label

3

· IMDG**· Class**

3 Flammable liquids

· Label

3

· IATA**· Class**

3 Flammable liquids

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· Label	3
· Packing group · DOT, IMDG, IATA	II
· Environmental hazards: · Marine pollutant:	Product contains environmentally hazardous substances: Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate Symbol (fish and tree)
· Special precautions for user · Danger code (Kemler): · EMS Number: · Stowage Category	Warning: Flammable liquids 33 F-E, S-E B
· 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
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	5L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1263 PAINT, 3, II, ENVIRONMENTALLY HAZARDOUS

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):**

7727-43-7	barium sulphate, natural
7779-90-0	trizinc bis(orthophosphate)
1314-13-2	zinc oxide

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

7727-43-7	barium sulphate, natural
136210-30-5	tetraethyl-N,N'-(methylenedicyclohexane-4,1-diyl)bis-DL-aspartate
628-63-7	pentyl acetate
79-20-9	methyl acetate
108-65-6	2-methoxy-1-methylethyl acetate
7779-90-0	trizinc bis(orthophosphate)
624-41-9	2-methylbutyl acetat
1314-13-2	zinc oxide
1333-86-4	Carbon black

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623-91-6	diethyl fumarate
104810-47-1	poly(oxy-1,2-ethanediyl), α -[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]- ω -[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]-
14808-60-7	Quartz (SiO ₂)
9002-88-4	Polyethylene low density
104810-48-2	poly(oxy-1,2-ethanediyl), α -[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]- ω -hydroxy-
41556-26-7	Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate
82919-37-7	methyl 1,2,2,6,6-pentamethyl-4-piperidylsebacate
123-86-4	n-butyl acetate

· **TSCA new (21st Century Act) (Substances not listed)**

112926-00-8	amorphous silica (silica gel, precipitated silica)
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· **Proposition 65**

· **Chemicals known to cause cancer:**

1333-86-4	Carbon black
14808-60-7	Quartz (SiO ₂)

· **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)**

7727-43-7	barium sulphate, natural	D, CBD(inh), NL(oral)
7779-90-0	trizinc bis(orthophosphate)	D, I, II
1314-13-2	zinc oxide	D, I, II

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

1333-86-4	Carbon black	A4
14808-60-7	Quartz (SiO ₂)	A2

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

1333-86-4	Carbon black
14808-60-7	Quartz (SiO ₂)

· **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:**

tetraethyl-N,N'-(methylenedicyclohexane-4,1-diyl)bis-DL-aspartate
Carbon black

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Quartz (SiO₂)

Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate

Hazard statements

Highly flammable liquid and vapor.

May cause an allergic skin reaction.

May cause cancer.

Precautionary statements

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Obtain special instructions before use.

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

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Avoid breathing dust/fume/gas/mist/vapors/spray

Contaminated work clothing must not be allowed out of the workplace.

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

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

In case of fire: Use for extinction: CO₂, powder or water spray.

Store in a well-ventilated place. Keep cool.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international 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:** Environment protection department.

- **Contact:** Mr. Williams

- **Date of preparation / last revision** 08/22/2025 / -

Abbreviations and acronyms:

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

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

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REL: Recommended Exposure Limit
Flam. Liq. 2: Flammable liquids – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
Carc. 1A: Carcinogenicity – Category 1A

US