

Safety Data Sheet acc. to OSHA HCS

Print Date 04/10/2015

Revision Date 04/10/2015

· **Product Identifier**

· **Trade Name:** UR3005 CLEAR B

· **Application of the Substance or Mixture:** Polyols

· **Details of the Supplier of the Safety Data Sheet (SDS)**

· **Manufacturer or Supplier:**

Resinlab, LLC
N109 W13300 Ellsworth Drive,
Germantown, WI 53022
1-800-388-8605
www.resinlab.com

· **Information Department:** Product Safety Department: msds@resinlab.com

· **Emergency Telephone Number:**

North America - Chemtrec: 1-800-424-9300 (24 hours)
International - Chemtrec: 01-703-527-3887 (24 hours)

2 Hazard(s) identification

· **Hazard Classification**

Eye Dam. 2B H320 Causes eye irritation.

· **Label Elements**

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

· **Pictogram(s)** No pictogram required by GHS; thus:

· **Signal Word** Warning

· **Hazard-determining Component(s)**

1,3-Butadiene, homopolymer, hydroxy-terminated

· **Hazard statements**

Causes eye irritation.

· **Precautionary statements**

Wash thoroughly after handling.

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

If eye irritation persists: Get medical advice/attention.

· **Prevention** Wash thoroughly after handling.

· **Hazard Rating System**

· **NFPA System**

· **NFPA Ratings (scale 0 - 4)**



Health = 1
Fire = 1
Reactivity = 0

NFPA special hazards (water reactivity and oxidizing property): None

· **HMIS System**

· **HMIS Ratings (scale 0 - 4)**

HEALTH	1
FIRE	1
REACTIVITY	0

Health = 1
Fire = 1
Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

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3 Composition/information on ingredients

Chemical Characterization: Mixtures

Composition/Information on Ingredients

CAS: 69102-90-5 EC number: 614-926-3	1,3-Butadiene, homopolymer, hydroxy-terminated	Eye Dam. 2B, H320	90-100%
CAS: 128-37-0 EINECS: 204-881-4 RTECS: GO 7875000	2,6-di-tert-butyl-p-cresol	 Aquatic Acute 1, H400  Acute Tox. 4, H302	2.5-5%

Classification System:

The Classifications were based on the Toxicological and Ecological Data of the substances/mixtures in the Section 11 and 12.

4 First-aid measures

Description of First Aid Measures

General Information

Ensure medical personnel are aware of exposure and take precautions for their personal protection; see Section 8 for the information of personal protection.

After Inhalation

 Remove victim from exposure to fresh air. Keep person at rest. Provide oxygen if person is not breathing.
 Supply fresh air; consult doctor in case of complaints.

After Skin Contact

 Gently wash contaminated skin with water.
 Remove all contaminated clothing and wash before reuse.
 Seek medical treatment in case of complaints.

After Eye Contact

 Rinse opened eyes under running water for at least 15 minutes.
 Remove contact lenses if present and easy to do so; continue rinsing.
 Seek medical treatment in case of complaints.

After Swallowing

 If victim is unconscious; never give anything by mouth.
 If victim is conscious; rinse out mouth and give victim small amounts of water.
 Seek medical treatment in case of complaints.

After Exposure Seek medical treatment in case of complaints.

Information for Doctor Have chemical containers, labels and/or (M)SDS ready when calling or visiting a medical center.

Indication of any Immediate Medical Attention and Special Treatment Needed

 liver tests
 lung tests
 thyroid tests
 Check section 11 Toxicological Information for further relevant information.

Additional Information

For additional information, please consult the corresponding first aid measures in the most current version of Emergency Response Guidebook which is produced by the US Department of Transportation.

5 Fire-fighting measures

Extinguishing Media

Suitable Extinguishing Agent(s)

 Use fire fighting measures and extinguishing agents that suit the environment.
 In case of fire, suitable extinguishing agents are:
 Alcohol resistant foam.
 Dry chemical or fire-extinguishing powder.

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Carbon dioxide (CO₂).

Water spray or water fog.

· **Unsuitable Extinguishing Agent(s)** No relevant information.

· **Firefighting Procedures**

Isolate fire and deny unnecessary entry.

Eliminate all ignition sources if safe to do so.

Do not extinguish fire unless flow can be stopped.

Fight fire remotely due to the risk of explosion.

Burning liquids may be moved by flushing with water; protect personnel and minimize property damage.

Fight fire from protected location or safe distance.

Contain fire water runoff if possible to prevent environmental pollution.

· **Special Hazards Arising in Fire**

Will not burn unless preheated.

In case of fire, following can be released:

Tin oxides

Carbon dioxide (CO₂) and Carbon monoxide (CO)

· **Advice for Firefighters**

If employees are expected to fight fires, they must be trained and equipped as stated in the OSHA fire brigades standard (29 CFR 1910.156).

As with any fire, wear positive-pressure self-contained breathing apparatus and full protective gear that are NIOSH approved.

· **Additional Information** Ensure adequate and functional fire fighting facilities equipped in working area at all times.

6 Accidental release measures

· **Personal Precautions**

Do not breathe gas, vapors, dusts or mists if their inhalable particles occur during use.

Ensure personnel take precautions for their personal protection during clean up; see Section 8 for the specific requirements.

· **Environmental Precautions** No further relevant information.

· **Cleaning Up Methods**

For large spills: remove with vacuum trucks or pump to storage/salvage vessels.

For small spills: absorb spilled chemical with liquid-binding materials.

Dispose contaminated chemicals as waste according to Section 13.

· **Additional Information** No further relevant information.

7 Handling and storage

· **Handling**

· **Precautions for Safe Handling**

Obtain special instruction before use; do not handle until all safety precautions have been read and understood.

Do not breathe gas, vapors, dusts or mists if their inhalable particles occur during handling.

Keep away from incompatible material(s).

Avoid any release into the environment.

Observe all the personal protection requirements in Section 8.

· **Information about Protection Against Explosions and Fires**

Will not burn unless preheated.

Keep away from heat, sparks, open flame and other ignition sources during handling.

· **Storage**

· **Requirements to be Met by Storerooms and Receptacles**

Store in a well-ventilated place; provide ventilation for receptacles.

Keep stored in accordance with local, regional, national, and international regulations.

· **Information about Storage in One Common Storage Facility**

Store away from incompatible material(s).

Store away from foodstuffs.

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Avoid release to the environment.

· **Additional Information** Store between 75 and 95 degrees F.

8 Exposure controls/personal protection

· Engineering Measures or Controls

· Exposure Limit Values that Require Monitoring at the Workplace

128-37-0 2,6-di-tert-butyl-p-cresol

REL Long-term value: 10 mg/m³

TLV Long-term value: 2* mg/m³
*as inhalable fraction and vapor

77-58-7 Dibutyltin dilaurate

REL Long-term value: 0.1 mg/m³
as Sn

REL Long-term value: 0.1 mg/m³
as Sn, Skin

TLV Short-term value: 0.2 mg/m³
Long-term value: 0.1 mg/m³
as Sn; Skin

· Other Engineering Measures or Controls

Ventilation rates should be matched to conditions.

If applicable, use process enclosure(s), local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.

· Personal Protective

· General Protective and Hygienic Measures

Do not eat, drink or smoke during work.

Keep food, drink or feed away from working area.

Contaminated work clothing is not allowed out of workplace.

Clean hands and exposed skin thoroughly after work and before breaks.

· Personal Protective Equipment (PPE)

· Breathing Equipment

Caution! Improper use of respirators is dangerous.

In case of brief exposure or low pollution, use a respiratory filter device.

In case of intensive or longer exposure, use a positive-pressure respiratory protective device that is independent of circulating air.

· Hand Protection



Protective gloves

Selection of glove material should take into consideration the penetration times, rates of diffusion, and the degradation.

Suggested glove type(s):

Nitrile Gloves

Butyl Rubber Gloves

· Eye Protection



Safety glasses

· Body Protection

No relevant information.

· Additional Information

All protective clothing (suits, gloves, footwear, headgear) should be clean, available every day, and put on before work.

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The Engineering measures or controls, and PPE recommendations are only guidelines and may not apply to every situation. For additional information, please consult the corresponding requirements under OSHA 29 CFR 1910.94-95, and 29 CFR 1910.132-138.

9 Physical and chemical properties

Information on Basic Physical and Chemical Properties

Appearance:

- **Form:** Liquid
- **Color:** Clear
- **Odor:** Characteristic
- **Odor Threshold:** Not determined.

· **PH-Value:** Not determined.

Change in Condition:

- **Melting Point:** Not determined.
- **Boiling Point:** >205 °C (>401 °F)
- **Flash Point:** > 204 °C (> 399 °F)
- **Decomposition Temperature:** Not determined.
- **Flammability:** Not determined.
- **Explosion:** Not determined.
- **Explosion Limits:**
 - **Lower:** Not determined.
 - **Upper:** Not determined.

- **Vapor Pressure:** Not determined.
- **Density at 20 °C (68 °F):** 0.90 g/cm³ (7.511 lbs/gal)
- **Solubility in or Miscibility with**
 - **Water:** Not miscible or difficult to mix.
- **Viscosity:**
 - **Dynamic at 20 °C (68 °F):** 7000 mPas
 - **Kinematic:** Not determined.

· **Additional Information** No further relevant information.

10 Stability and reactivity

- **Physical Hazard(s)** Not a regulated reactive or physical hazard under GHS.
- **Hazardous Reactivity and Chemical Stability** Stable under normal conditions of use, storage and temperatures.
- **Thermal Decomposition and Conditions to be Avoided**
 Keep away from incompatible material(s).
 Thermally decomposes during fire or high heat; keep away from heat, sparks, open flame and other ignition sources.
- **Possibility of Other Hazardous Reaction(s)** No further relevant information available.
- **Incompatible Material(s)**
 Strong reducing agents
 Free radical producing initiators.
 Oxidizing agents
 Strong bases
 Acids
- **Hazardous Decomposition Product(s)**
 Thermally decomposes during fire or very high heat. See Section 5 for fire hazards evolved during thermal decomposition.

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- **Hazardous Polymerization Product(s)** No relevant information.
- **Additional Information** No further relevant information.

11 Toxicological information

· Acute Toxicity

· Oral

69102-90-5 1,3-Butadiene, homopolymer, hydroxy-terminated

Oral LD50 (No data available)

128-37-0 2,6-di-tert-butyl-p-cresol

Oral LD50 > 2930 mg/kg (rat) (LD0; OECD TG 401)

No mortality, and no effects were observed for clinical signs, body weight and gross examination. The substance was therefore not classified as an acute oral hazard.

Reference: ECHA (2012) and OECD SIDS (2002).

· Potential Health Effect(s):

abnormal pain

nausea

vomiting

dizziness

No relevant information; classification is not possible.

· Dermal

69102-90-5 1,3-Butadiene, homopolymer, hydroxy-terminated

Dermal LD50 (No data available)

128-37-0 2,6-di-tert-butyl-p-cresol

Dermal LD50 ≥ 2000 mg/kg (rat) (LD0; OECD TG 402; occlusive)

No mortality, and no effects were observed with regard to clinical signs, body weight and gross examination. The substance was therefore not classified as an acute dermal hazard.

Reference: OECD SIDS (2002).

· Potential Health Effect(s): No relevant information; classification is not possible.

· Inhalative

69102-90-5 1,3-Butadiene, homopolymer, hydroxy-terminated

Inhalative LC50/4 h (No data available)

128-37-0 2,6-di-tert-butyl-p-cresol

Inhalative LC50/4 h (No data available)

· Potential Health Effect(s):

cough

sore throat

No relevant information; classification is not possible.

· Skin Corrosion or Irritation

69102-90-5 1,3-Butadiene, homopolymer, hydroxy-terminated

Corrosion/Irritation slightly irrit. (Test species: n/a)

Although no appropriate human or animal health effects data were known to exist, this substance was expected to be a slight skin irritant.

Reference: Sartomer (M)SDS (2005).

128-37-0 2,6-di-tert-butyl-p-cresol

Corrosion/Irritation slightly (rabbit) (Patch test; Semioclusive; neat substance)

Irritation score: 0.3 - 0.7 (Max. 8; Intact skin; time point: 24+72 hrs).

Irritation score: 0 - 0.3 (Max. 8; Abraded skin; time point: 24+72 hrs).

The substance was considered as slightly irritating (Category 3) to rabbit skin.

Reference: ECHA (2011).

· Potential Health Effect(s): No further relevant information; classification is not possible.

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· Eye Serious Damage or Irritation

69102-90-5 1,3-Butadiene, homopolymer, hydroxy-terminated

Damage/Irritation slightly irrit. (Test species: n/a)
 Although no appropriate human or animal health effects data were known to exist, this substance was expected to cause slight eye irritation.
 Reference: Sartomer (M)SDS (2005).

128-37-0 2,6-di-tert-butyl-p-cresol

Damage/Irritation slightly (rabbit)
 Cornea: 0/4 (Max. score: 4; Time point: 24h+48h+72h; mean score of all treated animals)
 Iris: 0/2 (Max. score: 2; Time point: 24h+48h+72h; mean score of all treated animals)
 Conjunctivae: 0.5/3 (Max. score: 3; Time point: 24h+48h+72h; mean score of all treated animals)
 Chemosis: 0.1/4 (Max. score: 4; Time point: 24h+48h+72h; mean score of all treated animals)
 All the symptoms were fully reversible at the end of the test period. The substance was considered as slightly irritating (Category 2B) to rabbit eyes from the view point of safety.
 Reference: ECHA (2012).

· Potential Health Effect(s):

Causes eye irritation.
 In contact with eye, may cause:
 redness and pain
 unlikely to cause corneal injuries

· Respiratory or Skin Sensitization

69102-90-5 1,3-Butadiene, homopolymer, hydroxy-terminated

Sensitization	Skin	(No data available)
	Respiratory	(No data available)

128-37-0 2,6-di-tert-butyl-p-cresol

Sensitization	Skin	not sensitizing (Human) Despite of being in wide dispersive use as an ingredient of various products for many years, only very few cases of allergic reaction in humans after dermal exposure or oral intake have been described. Meanwhile, only negative results were observed from dermal sensitizing tests with animals. Thus, the substance was not classified as a dermal sensitizer when considering the weight of all evidence. Reference: GHS-J (2006).
	Respiratory	(No data available)

· Potential Health Effect(s):

No relevant information for skin sensitization; classification is not possible.
 No relevant information for respiratory sensitization; classification is not possible.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

· Germ Cell Mutagenicity

69102-90-5 1,3-Butadiene, homopolymer, hydroxy-terminated

Mutagenicity (No data available)

128-37-0 2,6-di-tert-butyl-p-cresol

Mutagenicity negative (Test species listed below)
In Vitro (AME test; *Salmonella typhimurium* TA97, TA98, TA100, TA102, TA104, TA1535, TA1537, TA1538, TA2638) - negative with and without metabolic activation.
In Vitro (Mammalian chromosome aberration; Chinese hamster Ovary cells) - negative with and without metabolic activation.
In Vivo (Chromosome aberration assay; male rats; Oral with 750 mg/kg bw/day) - negative; no adverse effects on chromosomes of femur bone marrow cells of treated rats were observed.
In Vivo (Micronucleus assay; mouse; intraperitoneal with 75 mg/kg bw) - negative; incidence of micronuclei in polychromatic erythrocytes in test group was not statistically different from that in the control at all time points.
 Reference: ECHA (2012).

· Potential Health Effect(s): No relevant information; classification is not possible.

· Carcinogenicity

69102-90-5 1,3-Butadiene, homopolymer, hydroxy-terminated

Carcinogenicity negative (Test species: n/a)
 The substance was not listed as a Carcinogen by OSHA, ACGIH, NTP or IARC.

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128-37-0 2,6-di-tert-butyl-p-cresol

Carcinogenicity negative (Test species: n/a)

Not listed as a carcinogen by ACGIH, NTP, or OSHA; and listed as a Group 3 carcinogen by IARC, which was not classifiable as to its carcinogenicity to humans.

Potential Health Effect(s): Not a known Carcinogen.

Reproductive Toxicity
69102-90-5 1,3-Butadiene, homopolymer, hydroxy-terminated

Reproductive Toxi. (No data available)

128-37-0 2,6-di-tert-butyl-p-cresol

Reproductive Toxi. negative (rat) (2-generation chronic feeding; up to 500 mg/kg bw/d)

NOAEL (Reproductive toxicity; Parental animals) = 500 mg/kg bw/day; no adverse effects on fertility were observed.
LOAEL (Developmental toxicity) = 500 mg/kg bw/day; reduced body weight of pups at weaning and retarded development were observed at the highest test level. However, the changes were considered to be of negligible toxicological significance; no reproductive/developmental classification can be assigned to the substance.
Reference: ECHA (2012).

Potential Health Effect(s): No relevant information; classification is not possible.

Specific Target Organ Toxicity - Single Exposure
69102-90-5 1,3-Butadiene, homopolymer, hydroxy-terminated

STOT-Single (No data available)

128-37-0 2,6-di-tert-butyl-p-cresol

STOT-Single (Human) (human epidemiological reports)

Target organ: None.

Despite of being in wide dispersive use as an ingredient of various products for many years, two cases of acute intoxication were reported in which two adult women inadvertently ingested the substance (4g and 80g) on an empty stomach. After treatment, the symptoms (e.g. severe epigastric cramping, nausea, vomiting, neurological disorders) complete recovered within a few days. However, the case was considered to be statically negligible and toxicologically insignificant; no classification can be assigned to the substance.
Reference: OECD SIDS (2002).

Potential Health Effect(s): No relevant information; classification is not possible.

Specific Target Organ Toxicity - Repeated Exposure
69102-90-5 1,3-Butadiene, homopolymer, hydroxy-terminated

STOT-Repeated (No data available)

128-37-0 2,6-di-tert-butyl-p-cresol

STOT-Repeated (Rats and Mice)

Target organs: Category 2 (Lung, Liver, and Thyroid gland) via (Oral+Dermal)

(rat) (2-generation chronic feeding; up to 500 mg/kg bw/day)

NOAEL (F1 males) = 25 mg/kg bw/day; decreased body weight, increased incidence of hepatocellular foci and nodules, consistently increased liver enzymes, and hyperactive thyroid were observed in F1 males starting with dose level of 100 mg/kg bw/day.

(mouse) (Dermal; 145-867 (to males), 208-1245 (to females) mg/kg bw/day; four weeks)

NOAEL < 200 mg/kg bw/day; congestion and enlargement of lung; histologically, degeneration and necrosis of alveolar epithelial cells were observed.

Reference: ECHA (2012) and OECD SIDS (2002).

Potential Health Effect(s): No relevant information; classification is not possible.

Aspiration Hazard
69102-90-5 1,3-Butadiene, homopolymer, hydroxy-terminated

Aspiration Hazard (No data available)

128-37-0 2,6-di-tert-butyl-p-cresol

Aspiration Hazard (No data available)

Potential Health Effect(s): No relevant information; classification is not possible.

Additional Information No further relevant information.

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12 Ecological information

· Aquatic Environmental Toxicity

69102-90-5 1,3-Butadiene, homopolymer, hydroxy-terminated

Algae Toxicity	(No data available)
Crustacean Toxicity	(No data available)
Fish Toxicity	(No data available)

128-37-0 2,6-di-tert-butyl-p-cresol

Algae Toxicity	> 0.4 mg/l (<i>Scenedesmus subspicatus</i>) (EC50 (72 hrs); EU Method C3) EC8 (72h) = 0.4 mg/l
Crustacean Toxicity	0.61 mg/l (<i>Daphnia magna</i> (water flea)) (EC50 (48 hrs); OECD TG 202) 0.316 mg/l (NOEC (21 days); OECD TG 202) Based on the non-rapid degradability and the acute LC50 < 1 mg/l; the substance is classified as a Chronic-1 aquatic hazard.
Fish Toxicity	> 0.57 mg/l (<i>Brachydanio rerio</i> (Zebra fish)) (LC0 (96 hrs); Directive 84/449/EEC C1) Reference: ECHA (2012).

· **Aquatic Environmental Toxicity Assessment:** No relevant information; classification is not possible.

· Degradability and Stability

69102-90-5 1,3-Butadiene, homopolymer, hydroxy-terminated

Biodegradation	(No data available)
Persistence	(Test species: n/a) The substance is not persistent. Reference: Canada DSL (2007).
Photodegradation	(No data available)
Stability in water	(No data available)

128-37-0 2,6-di-tert-butyl-p-cresol

Biodegradation	non-biodegrad. (Test species: n/a) (Standard test; Chemical conc. 50 ppm; 4 weeks) Biodegradation (Indirect analysis from BOD) = 4.5% Biodegradation (Direct analysis from GC) = 0.8% The substance is non-biodegradable. Reference: CHRIP (2011).
Persistence	(Test species: n/a) The substance is not persistent. Reference: Canada DSL (2007).
Photodegradation	1.83E-11 cm ³ /molecule-sec (OH radical) (Estimated from AOPWIN, v1.90) Half-life (1.5E6 OH/cm ³) = 7 hours Reference: ECHA (2012).
Stability in water	(Test species: n/a) Half-life (DT50; 20 °C) = 4 - 8 days Reference: ECHA (2012).

· Bioaccumulation and Distribution

69102-90-5 1,3-Butadiene, homopolymer, hydroxy-terminated

BCF	(No data available) The substance is not bioaccumulative. Reference: Canada DSL (2007).
Koc	(No data available)
LogPow	(No data available)

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BCF	(Cyprinus carpio) BCF (8 weeks; 500 ppb) = 220 - 2800 BCF (8 weeks; 50 ppb) = 230 - 2500 BCF (8 weeks; 5 ppb) = 330 - 1800 The substance is moderately bioaccumulative.
Koc	(Test species: n/a) (Estimated by QSAR calculation) Koc = 8183 L/kg (log Kow based estimation), Koc = 14750 L/kg (MCI based estimation). Therefore, adsorption potential of the substance is not high. According to a Mackay Level I model calculation, the main target compartment for the substance is air (79-87 %), followed by soil (6.1-10.2 %) and sediment (5.7-9.5 %).
LogPow	5.1 (Test species: n/a) (Shake-flask method) Reference: CHRIP (2011) and ECHA (2012).

· **Degradability and Bioaccumulation Assessment:** No further relevant information; assessment is not possible.

· **Additional Information** No further relevant information.

13 Disposal considerations

· **Hazardous Waste List**

· **Description:** Not regulated as a hazardous waste for disposal.

· **Waste Treatment Recommendation:**

Generation of waste should be avoided or minimized wherever possible.

Chemical waste, even small quantities, is neither allowed to be poured down drains, sewage system or waterways; nor disposed with household garbage.

Dispose of contents/containers in accordance with local, regional, national, and international regulations.

· **Unused and Uncontaminated Packagings**

· **Recommendation** Dispose of according to your local waste regulations.

14 Transport information

· UN-Number	Not regulated for transport; not applicable.
· Transport hazard class(es)	Not regulated for transport; not applicable.
· Packing group	Not regulated for transport; not applicable.
· Environmental Hazards:	Not applicable.
· Special Precautions:	Not applicable.
· Transport in Bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional Information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	-

15 Regulatory information

· **USA Regulation Lists**

· **SARA (Superfund Amendments and Reauthorization Act of 1986)**

· **Section 302 (Extremely Hazardous Substances)**

None of the ingredients is listed.

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· **Section 313 (Toxics Release Inventory (TRI) reporting)**

None of the ingredients is listed.

· **Section 311/312 (Hazardous Chemical Inventory Reporting)**

None of the ingredients is listed.

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

All ingredients are listed.

· **Proposition 65**

· **Chemicals Known to Cause Cancer**

This product contains or may contain trace amounts of a substance(s) known to the State of California to cause cancer and or reproductive toxicity.

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**

None of the ingredients is listed.

· **Carcinogenic Categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

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

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· **NTP (National Toxicology Program)**

None of the ingredients is listed.

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

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A4

77-58-7 Dibutyltin dilaurate

A4

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

None of the ingredients is listed.

· **International Regulation Lists**

· **Canadian Domestic Substance Listings:**

All ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

· **Canadian Ingredient Disclosure list (limit 1%)**

128-37-0 2,6-di-tert-butyl-p-cresol

· **Chinese Chemical Inventory of Existing Chemical Substances:**

All ingredients are listed.

· **Japanese Existing and New Chemical Substance List:**

All ingredients are listed.

· **Korean Existing Chemical Inventory:**

All ingredients are listed.

· **European Pre-registered substances:**

All ingredients are listed.

· **REACH - Substances of Very High Concern (SVHC) List:**

None of the ingredients is listed.

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· **Restriction of Hazardous Substances Directive (RoHS) list:**

None of the ingredients is listed.

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.

This product and technical data related to this product are export controlled by the United States (US) Government. Exportation/international shipments of this product are subject to licensing by the US Government. Export, reexport or other diversion, either in the original form or after being incorporated in an intermediate process into other end-items, is **STRICTLY PROHIBITED** unless expressly authorized by the cognizant agency of the US Government. If you plan to export this material in some form, please contact Total Petrochemicals & Refining USA, Inc. for more information.
Export Control Classification Number (ECCN): 1C111

· **Department Issuing (M)SDS:** Product Safety Department

· **Contact:** msds@resinlab.com

· **Abbreviations and acronyms:**

ACGIH: American Conference of Governmental Industrial Hygienists
ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DOT: US Department of Transportation
HMIS: US National Paint & Coatings Association (NPCA) Hazardous Materials Identification System
IARC: International Agency for Research on Cancer developed by United Nations World Health Organisation (WHO)
ICAO-TI: Technical Instructions (TI) by the International Civil Aviation Organization (ICAO)
IMDG: International Maritime Dangerous Goods; the principal international rules for International Carriage of Dangerous Goods by SEA under the Recommendations on the Transport of Dangerous Goods by United Nations (RTDG)
LC50/LD50: Lethal Concentration/Dose, 50 percent
N/a: Not available or Not applicable
NFPA: US National Fire Protection Association
NIOSH: US National Institute of Occupational Safety and Health
OSHA: US Occupational Safety and Health Administration
P: Marine Pollutant
RCRA: Resource Conservation and Recovery Act (USA)
REACH: EU Registry, Evaluation and Authorisation of Chemicals
SARA: US Superfund Amendments and Reauthorization Act
TEEL: Temporary Emergency Exposure Limit developed by US Subcommittee on Consequence Assessment and Protective Actions (SCAPA) of US Department of Energy (DOE)
TSCA: US Toxic Substance Control Act
ECHA: European Chemicals Agency's Dissemination portal with information on chemical substances registered under REACH
IUCLID: EU REACH International Uniform Chemical Information Database
NLM TOXNET: US National Library of Medicine Toxicology Data Network
ACToR: US EPA Aggregated Computational Toxicology Resource
BCF: Bioconcentration Factor
CCRIS: US NLM TOXNET Chemical Carcinogenesis Research Information System
CHRIP: Japan NITE Information on Biodegradation and Bioconcentration of the Existing Chemical Substances in the Chemical Risk Information Platform
DSL: Canada Domestic Substance List
ESIS: European Chemical Substances Information System
HSDB: US NLM TOXNET Hazardous Substances Databank
HSNO CCID: New Zealand Hazardous Substances and New Organisms Chemical Classification Information Database
IATA-DGR: Dangerous Goods Regulations (DGR) by the International Air Transport Association (IATA)
ICSC: International Chemical Safety Cards
Koc: Partition coefficient, soil Organic Carbon to water
NITE: National Institute of Technology and Evaluation, Japan
OECD: Organisation for Economic Co-operation and Development
RID: the Regulations Concerning the International Carriage of Dangerous Goods by Rail; published by the Central Office for International Carriage by Rail (OTIF)
RTDG: the Recommendations on the Transport of Dangerous Goods by United Nations (UN)
RTECS: US Registry of Toxic Effects of Chemical Substances

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SIDS: OECD existing chemicals Screening Information Data Sets
SVHC: EU ECHA Substance of Very High Concern
TOXLINE: US NLM bibliographic database search system

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