Safety Data Sheet
acc. to OSHA HCS

Print Date 09/21/2016 Revision Date 09/21/2016

· **Product Identifier**
· **Trade Name: UR6001 Black A**
· **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
1-877-259-1669
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 Irrit. 2A H319 Causes serious eye irritation.

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

GHS07

· **Signal Word** Warning
· **Hazard statements**
H319 Causes serious eye irritation.
· **Precautionary statements**
Wear eye protection / face protection.
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.

· **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

· **Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical Characterization: Mixtures**

· **Composition/Information on Ingredients**		
CAS: 8001-79-4 EINECS: 232-293-8 RTECS: FI 4100000	Castor oil Eye Irrit. 2A, H319	25-30%
CAS: 13674-84-5	tris(2-chlorisopropyl)-phosphate Acute Tox. 4, H302; Acute Tox. 4, H312 Aquatic Acute 3, H402; Aquatic Chronic 3, H412	20-<25%
CAS: 1318-02-1 EINECS: 215-283-8	Zeolites Eye Irrit. 2A, H319; STOT SE 3, H335	2.5-5%
CAS: 67762-90-7 EC number: 614-122-2	Siloxanes and Silicones, di-Me, reaction products with silica	1-2.5%
CAS: 1333-86-4 EINECS: 215-609-9 RTECS: FF5800000	Carbon black	0.1-1%
CAS: 77-58-7 EINECS: 201-039-8 RTECS: WH 7000000	Dibutyltin dilaurate Muta. 2, H341; Repr. 1B, H360; STOT RE 1, H372 Skin Corr. 1C, H314; Eye Dam. 1, H318 Skin Sens. 1, H317	0-<0.1%

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· ***Classification System:***
The Classifications were based on the Toxicological and Ecological Data of the substances/mixtures in the Section 11 and 12.
· ***Additional Information:***
If the chemical name/CAS number is proprietary and or weight percentage is listed as a range, the specific chemical identity and or percentage of composition has been withheld as a trade secret.

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***
Immediately bathe eyes for 15 minutes under running water.
Immediately remove contact lenses if present. 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.
· ***Information for Doctor***
· ***Indication of any Immediate Medical Attention and Special Treatment Needed***
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.
Carbon dioxide (CO_2).
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.
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:
hydrogen chloride
Formaldehyde, a skin and lung sensitizer and a regulated carcinogen, may be formed during fires.
Carbon dioxide (CO_2) and Carbon monoxide (CO)
Aluminum oxide (Al_2O_3) dust, a serious respiratory irritant, may be formed during fires.
Sodium oxides
Phosphorus oxide (P_2O_5)
Silicon oxide (SiO_2)
· ***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*** *Caution! Finely dispersed substance may form explosive mixtures in air.*

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.*

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· ***Cleaning Up Methods***
Ensure adequate ventilation.
Eliminate all ignition sources.
Keep unauthorized personnel away.
For large spills:
Shut off source of leak if safe to do so.
Dike and contain.
Remove with vacuum trucks or pump to storage/salvage vessels.
Absorb residues with liquid-binding materials.
Avoid confined spaces, such as sewers, because of the possibility of an explosion.
For small spills:
Ventilate and wash area after clean-up is complete.
Collect spills in suitable and properly labeled containers.
Do not use solvents unless following safe handling practices and within the recommended exposure guidelines.
Dispose contaminated chemicals as waste according to Section 13.

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

7 Handling and storage

· ***Handling***
· ***Precautions for Safe Handling***
Keep away from incompatible material(s).
Avoid any release into the environment.
For industrial or professional use only
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.
Dust can combine with air to form an explosive mixture.

· ***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.
Avoid release to the environment.

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

8 Exposure controls/personal protection

· ***Engineering Measures or Controls***
· ***Exposure 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.

8001-79-4 Castor oil	
TEEL-1	*Short-term value: 125 mg/m³*
TEEL-2	*Short-term value: 500 mg/m³*
TEEL-3	*Short-term value: 500 mg/m³*
67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica	
OSHA PEL	*Short-term value: 15 mg/m³*
US ACGIH	*Short-term value: 10 mg/m³*
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*
77-58-7 Dibutyltin dilaurate	
PEL	*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***
Avoid any contact with eye.
Do not eat, drink or smoke during work.
Avoid contact with eyes.
Clean hands and exposed skin thoroughly after work and before breaks.

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· **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**
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
· **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.
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:** Black
· **Odor:** Characteristic
· **Odor Threshold:** Not determined.

· **PH-Value:** Not determined.

· **Change in Condition:**
· **Melting Point:** Not determined.
· **Boiling Point:** Not determined.
· **Flash Point:** >120 °C (>248 °F)
· **Decomposition Temperature:** Not determined.
· **Flammability:** Not determined.
· **Explosion:** Not determined.
· **Explosion Limits:**
· **Lower:** Not determined.
· **Upper:** Not determined.

· **Vapor Pressure:** Not determined.
· **Vapor Density:** not determined
· **Density at 20 °C (68 °F):** 1.38 g/cm³ (11.516 lbs/gal)
· **Solubility in or Miscibility with**
· **Water:** Not miscible or difficult to mix.
· **Viscosity:**
· **Dynamic:** Not determined.
· **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)** May generate flammable hydrogen (H_2) in contact with alkali metals and hydrides.
· **Incompatible Material(s)**
Water
trimethylolpropane
Oxidizing agents
Acids
Bases (Alkalis)
Oxidizing acids
· **Hazardous Decomposition Product(s)**
Thermally decomposes during fire or very high heat. See Section 5 for fire hazards evolved during thermal decomposition.
· **Hazardous Polymerization Product(s)** No relevant information.
· **Additional Information** No further relevant information.

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11 Toxicological information

· **Acute Toxicity**

· **Oral**		
21645-51-2 Aluminum hydroxide		
Oral	LD50	(rat) (LD0(OECD TG 401)>5000mg/kg: no death occurred) No mortality was observed after a single oral administration with 5000 mg/kg of the substance. Reference: ECHA (2011) and IUCLID Dataset (2000).
8001-79-4 Castor oil		
Oral	LD50	(Human) (Probable oral lethal dose=5000-15000 mg/kg) Reference: NLM HSDB (2011).
13674-84-5 tris(2-chlorisopropyl)-phosphate		
Oral	LD50	3600 mg/kg (rat)
25265-71-8 Dipropylene glycol		
Oral	LD50	> 5000 mg/kg (rat) (EPA OPP81-1) No death or abnormal effect found at the end of the 1-day observation period. Reference: ECHA (2011).
1318-02-1 Zeolites		
Oral	LD50	> 5110 mg/kg (rat) (OECD TG 401) > 10000 mg/kg (mouse) (Henkel-method) Reference: IUCLID Dataset (2000).
67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica		
Oral	LD50	>5000 mg/kg (rat) (test method not specified) Reference: Cabot (M)SDS (2012).

· **Potential Health Effect(s):**
diarrhea
abnormal pain, headache, nausea, vomiting, drowsiness
See acute inhalative effect(s) for further information

· **Dermal**		
21645-51-2 Aluminum hydroxide		
Dermal	LD50	(Test species: n/a) (Toxicity not expected based on acute oral data)
8001-79-4 Castor oil		
Dermal	LD50	(Test species: n/a) (Toxicity not expected based on acute oral data)
25265-71-8 Dipropylene glycol		
Dermal	LD50	> 5010 mg/kg (rabbit) (EPA OPP81-2) No death or abnormal effect found at the end of the 14-day observation period. Reference: ECHA (2011).
1318-02-1 Zeolites		
Dermal	LD50	(rabbit) (LD0 ≥ 2000 mg/kg; Henkel-method) No mortality or any signs of toxicity observed; the substance was not classified as hazardous via dermal application. Reference: IUCLID Dataset (2000).
67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica		
Dermal	LD50	(Test species: n/a) (Toxicity not expected based on acute oral data) Based on the acute oral toxicity test, it was expected that toxicity to mammals via dermal application of the substance was not a significant concern and resulted in a similar lack of acute toxicity. Thus, the substance was not classified as an acute dermal hazard as a wetted form.

· **Potential Health Effect(s):**
No further relevant information available; classification is not possible.
See acute inhalative effect(s) for further information.

· **Inhalative**		
21645-51-2 Aluminum hydroxide		
Inhalative	LC50/4 h	(Test species: n/a) (Toxicity not expected as a wetted form) Due to wetted form, inhalative effects of the substance can be seen as negligible.
8001-79-4 Castor oil		
Inhalative	LC50/4 h	(Test species: n/a) (Toxicity not expected based on acute oral data)
25265-71-8 Dipropylene glycol		
Inhalative	LC50/4 h	(rat) (LC0 (EPA OPP81-3) > 2.34 mg/l) No death or abnormal effect found at the end of the 2-week observation period up to the maximum tested dose level of 2.34 mg/L/4 hours. Reference: ECHA (2011).
1318-02-1 Zeolites		
Inhalative	LC50/4 h	(Test species: n/a) Due to wetted form of the substance, inhalative effects from dust form can be seen as negligible. Meanwhile, based on the acute oral toxicity test, it was expected that toxicity to mammals via inhalation of the substance was not a significant concern and resulted in a similar lack of acute toxicity. Thus, the substance was not classified as an acute inhalation hazard as a wetted form.
67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica		
Inhalative	LC50/4 h	(Test species: n/a) (Toxicity not expected based on acute oral data) Due to wetted form of the substance, inhalative effects from dust form can be seen as negligible. Meanwhile, based on the acute oral toxicity test, it was expected that toxicity to mammals via inhalation of the substance was not a significant concern and resulted in a similar lack of acute toxicity. Thus, the substance was not classified as an acute inhalation hazard.

· **Potential Health Effect(s):**
While not possible to classify the acute inhalative hazard due to missing data, the product may cause the following symptom(s):

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· **Skin Corrosion or Irritation**

21645-51-2 Aluminum hydroxide	
Corrosion/Irritation	not irritating (rabbit) (OECD TG 404; semiocclusive; 4hr-contact; undiluted)
8001-79-4 Castor oil	
Corrosion/Irritation	slightly irrit. (Human) (After 0.05g neat substance to males) 0.05 g neat substance applied to skin of the back of 50 adult male volunteers for 48 hours induced irritating scores ranging from negative to bullous. The substance was classified as mildly irritating to human skin (Category 3) for safety reason. Reference: NLM HSDB (2011).
25265-71-8 Dipropylene glycol	
Corrosion/Irritation	(rabbit) (EPA OPP81-5) Erythema: 0 (time point: 24+48+72 hours; mean score of all treated animals) Edema: 0 (time point: 24+48+72 hours; mean score of all treated animals) Reference: ECHA (2011). (rabbit) (Draize test) The substance was slightly irritating to rabbit skin (500 mg; 24 hours; occluded). Reference: OECD SIDS (2001).
1318-02-1 Zeolites	
Corrosion/Irritation	not irritating (rabbit) (OECD TG 404) not irritating (human) (Patch test) The substance was not a dermal irritant. Reference: IUCLID Dataset (2000).
67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica	
Corrosion/Irritation	Non-irritating (Test species: n/a) (Primary irritation index=0) mildly irritating (rabbit) (Read across from CAS 63148-62-9) No test detail available; for safety reasons, the substance was classified as mildly irritating (Category 3) to rabbit skin. Reference: HSNO CCID (2010).

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

· **Eye Serious Damage or Irritation**

21645-51-2 Aluminum hydroxide	
Damage/Irritation	not irritating (rabbit) No eye irritation to rabbit eyes OECD Test Guideline 405
8001-79-4 Castor oil	
Damage/Irritation	slightly irrit. (Human) (mild discomfort and minor epithelial changes found) Daily application of the substance to eyes of 9 patients for 15 days resulted in mild and transient discomfort and minor epithelial changes. The substance was therefore classified as mildly irritating to human eyes (Category 2B). Reference: NLM HSDB (2011).
25265-71-8 Dipropylene glycol	
Damage/Irritation	(rabbit) (EPA OPP81-4) Cornea, Iris, Conjunctivae and Chemosis: 0 (time point: 24+48+72 hours; mean score of all treated animals). Reference: ECHA (2011). (rabbit) (Draize test) The substance is slightly irritating to rabbit eyes (0.1 mL neat substance; 24 hrs; semi-occluded) Reference: OECD SIDS (2001).
1318-02-1 Zeolites	
Damage/Irritation	(rabbit) -(Draize test and Directive 84/449/EEC B5): Slightly irritating. Instillation of 10 mg neat substance in rabbit eyes caused a foreign-body reaction due to mechanical action of the substance. -(OECD TG 405): Not irritating. There were no alterations in cornea or iris, but slight hyperemia in conjunctiva observed. For safety reason, the substance was classified as a slight eye irritant (Category 2B). Reference: IUCLID Dataset (2000).
67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica	
Damage/Irritation	slightly irrit. (Human) (Read across from CAS 63148-62-9) non-irritating (Primary irritation index=0) Transient ocular irritation was observed in humans, rabbits, dogs, and monkeys after injection of the substance to their eye bodies. However, those effects can be seen as negligible based on regular use of the substance. When applying lower viscosity substance-oil mixture to human and rabbit eyes, there was no cornea injury, but a delay of healing of the existed corneal erosion observed. For safety reasons, the substance was classified as a slight eye irritant (Category 2B). Reference: ACToR (2011) and Cabot (M)SDS (2012).

· **Potential Health Effect(s):**
Causes serious eye irritation.
In contact with eye, may cause:
redness and pain

· **Respiratory or Skin Sensitization**

21645-51-2 Aluminum hydroxide		
Sensitization	Skin	not sensitizing (guinea pig) (OECD TG 406; intradermal and epicutaneous) Skin sensitizing reaction was not observed; the substance was not classified as a skin sensitizer.Reference: ECHA (2011).
	Respiratory	(No data available) Due to wetted form, inhalative effects of the substance can be seen as negligible.
8001-79-4 Castor oil		
Sensitization	Skin	sensitizing (Human) (clear hyperchromasia observed after 10 days) Undiluted substance which was daily applied to test fields delineated on the right thigh of three males (22 to 31 years old) less than 30 seconds for 10 days resulted in macroscopic and microscopic skin changes including clear hyperchromasia, an increase in the number of cells in the basal cell layer, slight widening of the granular cell layer. For safety reason, the substance was classified as a skin sensitizer to humans (Category 1). Reference: NLM HSDB (2011).

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	Respiratory	(No data available)
25265-71-8 Dipropylene glycol		
Sensitization	Skin	(guinea pig) (EPA OPP81-6) Number with positive reactions: 0 (0.5 mL neat substance; Time point: 24+48+72 hrs) The substance is not sensitizing to pig skin. Reference: ECHA (2011).
	Respiratory	(No data available)
1318-02-1 Zeolites		
Sensitization	Skin	not sensitizing (guinea pig) (Buehler test and maximization test) not sensitizing (human) (Buehler test) The substance did not induce any sensitizing reactions in either of the tests; the substance was not classified as a dermal sensitizer. Reference: IUCLID Dataset (2000).
	Respiratory	(Test species: n/a) Due to the wetted form, inhalative effects of the substance can be seen as negligible.
67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica		
Sensitization	Skin	(No data available) Primary irritation index=0 Non-irritating. Cabot MSDS (2012)
	Respiratory	(No data available)

· **Potential Health Effect(s):** 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**

21645-51-2 Aluminum hydroxide	
Mutagenicity	negative (rat) Mouse lymphocyte/Result: negative/Mutagenicity (micronucleus test) Rat - male/Result: negative
8001-79-4 Castor oil	
Mutagenicity	negative (salmonella typhimurium) (In Vitro (AMEs test; TA 97, 98, 1535 strains)) Reference: CCRIS (2011).
25265-71-8 Dipropylene glycol	
Mutagenicity	(Test species listed below) In Vitro (bacterial reverse mutation assay; S. typhimurium) - negative with and without metabolic activation In Vitro (Mammalian cell gene mutation assay; mouse lymphoma L5178Y cells; OECD TG 476) - negative with and without metabolic activation In Vivo (micronucleus assay; mouse; oral with up to 2000 mg/kg bw; OECD TG 474) - No genotoxicity effects found. Reference: ECHA (2011).
1318-02-1 Zeolites	
Mutagenicity	(salmonella typhimurium) In Vitro (AMES tests; OECD TG 471) - negative with and without metabolic activation Reference: IUCLID Dataset (2000).
67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica	
Mutagenicity	negative (Chinese Hamster) (In Vitro (AMES Test)) negative (Chinese Hamster) (In Vitro (Chromosomal aberration in ovary cells)) Reference: Cabot (M)SDS (2012).

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

· **Carcinogenicity**

21645-51-2 Aluminum hydroxide	
Carcinogenicity	negative (Human) The substance was not regulated as a carcinogen by IARC, NTP, or OSHA. Reference: ECHA (2011).
8001-79-4 Castor oil	
Carcinogenicity	negative (mouse) (no tumor found after 20 week dermal doses) After dermal semiweekly application of the substance for 20 weeks, no tumor was observed. Reference: NLM HSDB.
25265-71-8 Dipropylene glycol	
Carcinogenicity	(rat) NOAEL (oral; carcinogenicity, male rats) = 3040 mg/kg bw/day NOAEL (oral; carcinogenicity, female rats) = 2330 mg/kg bw/day No neoplastic lesion found at the highest dose tested; not classified as a carcinogen. Reference: ECHA (2011).
1318-02-1 Zeolites	
Carcinogenicity	(rat) -Route: oral with up to 60 mg/kg bw/day for two years No significant incidence of particular types of tumors was evident in any of the tested organs, nor was there an indication of relevant induction of neoplasms. Thus, the substance was not classified as a carcinogen. -Route: other Due to normal use and as a wetted form, carcinogenicity studies of the substance via intraperitoneal injection (i.p.) and inhalation routes were not included. Reference: IUCLID Dataset (2000).
67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica	
Carcinogenicity	(Test species: n/a) (Not listed by IARC, NTP, OSHA or ACGIH)

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

· **Reproductive Toxicity**

21645-51-2 Aluminum hydroxide	
Reproductive Toxi.	negative (rat) (OECD TG 414; oral; 10 day-treatment; twice/day) Reference: ECHA (2011).

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8001-79-4 Castor oil	
Reproductive Toxi.	negative (Human) (No statistically reproductive toxicity observed) A 33-year-old pregnant female (at week 40 of gestation) appeared cardiopulmonary arrest due to amniotic fluid embolism within 60 min of ingestion of the substance. However, classification was not possible due to statistical insignificance of the case. (rats and mice) There was little or no evidence of any reproductive toxicity in the treated animals observed after repeated oral administration of 10% solution of the substance for 13 weeks. Reference: NLM HSDB (2011).
25265-71-8 Dipropylene glycol	
Reproductive Toxi.	(rat) (Read-across from 57-55-6; oral) NOAEL (P-generation; male/female) = 10100 mg/kg bw/day NOAEL (fertility; F1 and F2-generations) = 10100 mg/kg bw/day No effects reported at the highest dose tested. (rabbit) (OECD TG 414; oral) NOAEL (developmental and maternal toxicity) $\geq$ 1200 mg/kg/day No effects reported at the highest dose tested. Reference: ECHA (2011).
1318-02-1 Zeolites	
Reproductive Toxi.	(rat) negative (Oral with up to 1600 mg/kg daily on days 6-15 of pregnancy) NOAEL (Maternal toxicity and Teratogenicity) $\geq$ 1600 mg/kg. There were no adverse effects observed on dams, embryos, or fetuses at any dose tested. Reference: IUCLID Dataset (2000).
67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica	
Reproductive Toxi.	(No data available)

· **Specific Target Organ Toxicity - Single Exposure**

21645-51-2 Aluminum hydroxide	
STOT-Single	Target: None (rat) (No mortality or any adverse effect observed) No mortality or any adverse effect was observed after a single oral administration of 2000 mg/kg to rats.Reference: ECHA (2011).
8001-79-4 Castor oil	
STOT-Single	(Human) (Respiratory tract irritation via Inhalation) The substance caused respiratory tract irritation based on human evidence. Reference: NLM HSDB (2011).
25265-71-8 Dipropylene glycol	
STOT-Single	(Test species listed below) (EPA OPP81-1,2,&3) Target organs: None Rat (Oral with 5000 mg/kg): no abnormal effects were found at the end of the 1-day observation period. Rabbit (Dermal with 5010 mg/kg): no abnormal effects were found at the end of the 14-day observation period. Rat (Inhalative with 2.34 mg/L/4 H): no abnormal effects were found at the end of the 2-week observation period. Reference: ECHA (2011).
1318-02-1 Zeolites	
STOT-Single	(rabbit) Target organ: None A single dermal application of 2000 mg/kg of the substance caused no signs of local or systemic effects. Reference: IUCLID Dataset (2000).
67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica	
STOT-Single (dynamic)	(No data available)

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

· **Specific Target Organ Toxicity - Repeated Exposure**

21645-51-2 Aluminum hydroxide	
STOT-Repeated	Target: None (rat) (OECD TG 407; neat substance; 28 days; oral) NOAEL (male rats) = 302 mg/kg bw/day: No mortality or any adverse effect was observed at daily doses up to 302 mg/kg body weight to rats. Reference: ECHA (2011).
8001-79-4 Castor oil	
STOT-Repeated	Target: None (Human) (After repeated inhalative exposure) 13 out of 28 employees (employment period varied from 2 months to 20 years; both males and females; 25 smokers) of a company involving importing, preparing, and distributing plant products of the substance exhibited symptoms including rhinitis, conjunctivitis, asthma, itch, and/or urticaria. However, there was no evidence that the symptoms were the substance or their smoking relevant. Thus, it was not possible to make a classification without further information. Reference: NLM HSDB (2011).
25265-71-8 Dipropylene glycol	
STOT-Repeated	(rat) NOAEL (oral; male and female rats) = 470 and 530 mg/kg/day Effects in liver (increased incidence of bile duct hyperplasia) and nose (increased incidence of olfactory epithelial atrophy and degeneration) were found at 3040 mg/kg/day (male rats) and 2330 mg/kg/day (female rats) group. Reference: ECHA (2011).
1318-02-1 Zeolites	
STOT-Repeated	(rat) Target organs: None NOEAL (oral; 7 days; males and females) > 5000 mg/kg bw/day NOEAL (oral; 90 days) = 5000 ppm; there were no differences observed between the test and control groups at 5000 ppm dose level. The substance was therefore not classified as a target organ hazard upon repeated exposure. Reference: IUCLID Dataset (2000).
67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica	
STOT-Repeated	(No data available)

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· **Aspiration Hazard**

21645-51-2 Aluminum hydroxide	
Aspiration Hazard	(No data available)
8001-79-4 Castor oil	
Aspiration Hazard	(No data available)
25265-71-8 Dipropylene glycol	
Aspiration Hazard	(No data available)
1318-02-1 Zeolites	
Aspiration Hazard	(No data available)
67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica	
Aspiration Hazard	(No data available)

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

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

12 Ecological information

· **Aquatic Environmental Toxicity**

21645-51-2 Aluminum hydroxide	
Algae Toxicity	> 100 mg/l (Selenastrum capricornum) (NOEC (72 hrs); OECD TG 201)
Crustacean Toxicity (static)	> 100 mg/l (Daphnia magna (water flea)) (NOEC (48 hrs); OECD TG 202)
Fish Toxicity	> 100 mg/l (Brown trout (Salmo trutta or Sea trout)) (NOEC (96 hrs); OECD TG 203) Reference: IUCLID Dataset (2000).
8001-79-4 Castor oil	
Algae Toxicity	(No data available)
Crustacean Toxicity	(No data available)
Fish Toxicity	(No data available)
25265-71-8 Dipropylene glycol	
Algae Toxicity	> 100 mg/l (Desmodesmus subspicatus) (EC50 (72 hr); OECD TG 201) 1545 mg/L (EC50 (96 hr); growth rate; Calculated by ECOSAR; green algae)
Crustacean Toxicity (static)	> 100 mg/l (Daphnia magna (water flea)) (EC50 (48 hrs); OECD TG 202) 8497 mg/L (LC50 (48 hr); Calculated by ECOSAR; daphnids) 694 mg/L (ChV (16 days); Calculated by ECOSAR; daphnids)
Fish Toxicity	> 1000 mg/l (Oryzias latipes (Rice fish)) (LC50(96 hr); Read-across from 24800-44-0; OECD 203) 20889 mg/L (LC50 (96 hr); Calculated by ECOSAR; fresh water fish) 1878 mg/L (ChV (30 days); Calculated by ECOSAR; fresh water fish) Due to the acute LC50>100 mg/L, the substance is not classified as an environmental hazard. Reference: ECHA (2011).
1318-02-1 Zeolites	
Algae Toxicity	(Chlorella vulgaris) EC50 (96 hrs; biomass) = 560 - 1800 mg/L NOEC (18 days; growth rate) = 1 mg/L (Scenedesmus subspicatus) EC50 (96 hrs; OECD TG 201) = 18 mg/L
Crustacean Toxicity	(Daphnia magna (water flea)) EC50 (24 hrs; OECD TG 202) = 1808 mg/L EC50 (48 hrs) = 1000 - 1800 mg/L NOEC (21 days; reproduction rate) = 10 mg/L
Fish Toxicity	1800 - 3200 mg/l (Poecilia reticulata) (LC50 (96 hrs) and LC50 (28 days)) 1800 mg/l (Brachydanio rerio (Zebra fish)) (LC50 (96 hrs); OECD TG 203) When considering all of the evidence, the substance is not classified as an aquatic environmental hazard. Reference: IUCLID Dataset (2000).
67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica	
Algae Toxicity	> 10000 mg/l (Scenedesmus subspicatus) (ErC50 (24 hrs), OECD 201)
Crustacean Toxicity	> 1000 mg/l (Daphnia magna (water flea)) (EC50 (24 hrs), OECD 202)
Fish Toxicity	> 10000 mg/l (Brachydanio rerio (Zebra fish)) (LC50 (96 hrs), OECD 203) Reference: Cabot (M)SDS (2012).

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

· **Degradability and Stability**

21645-51-2 Aluminum hydroxide	
Biodegradation	non-biodegrad. (Test species: n/a) (Due to being persistent)
Persistence	(Test species: n/a) (The substance is persistent) Reference: Canada DSL (2007).
Photodegradation	(No data available)
Stability in water	(No data available)
8001-79-4 Castor oil	
Biodegradation	(No data available)
Persistence	(Test species: n/a) (The substance is not persistent) Reference: Canada DSL (2007).
Photodegradation	2.54E-10 cm³/molecule-sec (OH radical) Reference: NLM HSDB (2011).
Stability in water	(No data available)

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25265-71-8 Dipropylene glycol	
Biodegradation	non-biodegrad. (Test species: n/a) (OECD TG 302C; 4 weeks; Chemical conc.30 ppm) Biodegradation (Direct from TOC, GC) = 16% and 9% Biodegradation (Indirect from BOD) = 1% The substance is not biodegradable. Reference: CHRIP (2011).
Persistence	(Test species: n/a) The substance is not persistent. Reference: Canada DSL (2007).
Photodegradation	9.97E-11 cm³/molecule-sec (OH radical) (Calculated by QSAR; at 25 °C) Half-life (12-hr day; 1.5E6 OH/cm³) = 0.107 days = 1.287 hours Reference: ECHA (2011).
Stability in water	(No data available) There is no hydrolyzable groups in the substance; thus, it is expected to be stable in water.
1318-02-1 Zeolites	
Biodegradation	non-biodegrad. (Test species: n/a) As an insoluble inorganic metal compound, biodegradation of the substance is not expected.
Persistence	(Test species: n/a) As an insoluble inorganic metal compound, the substance is expected to be persistent in the environment.
Photodegradation	(Test species: n/a) As an insoluble inorganic metal compound, photodegradation of the substance is not expected.
Stability in water	(Test species: n/a) Hydrolysis has a half-life of about 1 - 2 months depending on pH values (lower pH values accelerate the hydrolysis). Reference: OECD SIAM (2006).
67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica	
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)

· **Bioaccumulation and Distribution**

21645-51-2 Aluminum hydroxide	
LogPow	(No data available)
BCF	(Test species: n/a) (The substance is not bioaccumulative) Reference: Canada DSL (2007).
Koc	(No data available)
8001-79-4 Castor oil	
LogPow	(No data available)
BCF	(Test species: n/a) (The substance is not bioaccumulative) Reference: Canada DSL (2007).
Koc	(No data available)
25265-71-8 Dipropylene glycol	
LogPow	-1.486 (Test species: n/a) Reference: OECD SIDS (2001).
BCF	(Cyprinus carpio) BCF (Chemical concentration: 3 mg/L; 6 weeks) = 0.3 - 1.4 BCF (Chemical concentration: 0.3 mg/L; 6 weeks) < 4.6 The substance is non or low bioaccumulative in aquatic environment. Reference: CHRIP (2011).
Koc	≤ 1.6 L/kg (Test species: n/a) Reference: ECHA (2011).
1318-02-1 Zeolites	
LogPow	(No data available)
BCF	(No data available) The substance is not bioaccumulative. Reference: OECD SIAM (2006).
Koc	(No data available)
67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica	
LogPow	(No data available)
BCF	(No data available) (The substance is not bioaccumulative) Reference: Canada DSL CCR (2011).
Koc	(No data available)

· **Degradability and Bioaccumulation Assessment:** Non-rapidly degradable, and low bioaccumulative.

· **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.

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· **Unused and Uncontaminated Packagings**
· **Recommendation** Dispose of according to your local waste regulations.

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14 Transport information

· **UN-Number**	
· **DOT, ADR, ADN, IMDG, IATA**	Not Regulated
· **UN Proper Shipping Name**	
· **DOT, ADN, IMDG, IATA**	Not Regulated
· **Transport hazard class(es)**	
· **DOT, ADR, ADN, IMDG, IATA**	
· **Class**	Not Regulated
· **Packing group**	
· **DOT, ADR, IMDG, IATA**	Not Regulated
· **Environmental Hazards:**	Not applicable.
· **Special Precautions:**	Not applicable.
· **Transport in Bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **UN "Model Regulation":**	Not Regulated

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.

· **Section 313 (Toxics Release Inventory (TRI) reporting)**
None of the ingredients is listed.

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

1333-86-4	Carbon black	A, C	0.1-1%

· **Hazard Abbreviations for SARA 311/312**
A - Acute Health Hazard
C - Chronic Health Hazard
F - Fire Hazard
R - Reactive Hazard
S - Sudden Release of Pressure Hazard

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

21645-51-2	Aluminum hydroxide
8001-79-4	Castor oil
13674-84-5	tris(2-chlorisopropyl)-phosphate
25265-71-8	Dipropylene glycol
67762-90-7	Siloxanes and Silicones, di-Me, reaction products with silica
1333-86-4	Carbon black
77-58-7	Dibutyltin dilaurate

· **Proposition 65**

· **Chemicals Known to Cause Cancer**

1333-86-4	Carbon black

· **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)**

1318-02-1	Zeolites	3
1333-86-4	Carbon black	2B

· **NTP (National Toxicology Program)**
None of the ingredients is listed.

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

1333-86-4	Carbon black	A4
77-58-7	Dibutyltin dilaurate	A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**
None of the ingredients is listed.

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· **International Regulation Lists**

· **Canadian Domestic Substance Listings:**	
21645-51-2	Aluminum hydroxide
8001-79-4	Castor oil
13674-84-5	tris(2-chlorisopropyl)-phosphate
25265-71-8	Dipropylene glycol
1318-02-1	Zeolites
67762-90-7	Siloxanes and Silicones, di-Me, reaction products with silica
1333-86-4	Carbon black
77-58-7	Dibutyltin dilaurate

· **Canadian Ingredient Disclosure list (limit 0.1%)**
None of the ingredients is listed.

· **Canadian Ingredient Disclosure list (limit 1%)**	
8001-79-4	Castor oil
67762-90-7	Siloxanes and Silicones, di-Me, reaction products with silica

· **Chinese Chemical Inventory of Existing Chemical Substances:**	
21645-51-2	Aluminum hydroxide
8001-79-4	Castor oil
13674-84-5	tris(2-chlorisopropyl)-phosphate
25265-71-8	Dipropylene glycol
1318-02-1	Zeolites
67762-90-7	Siloxanes and Silicones, di-Me, reaction products with silica
1333-86-4	Carbon black
77-58-7	Dibutyltin dilaurate

· **Japanese Existing and New Chemical Substance List:**	
21645-51-2	Aluminum hydroxide
13674-84-5	tris(2-chlorisopropyl)-phosphate
25265-71-8	Dipropylene glycol
1318-02-1	Zeolites
67762-90-7	Siloxanes and Silicones, di-Me, reaction products with silica
1333-86-4	Carbon black
77-58-7	Dibutyltin dilaurate

· **Korean Existing Chemical Inventory:**	
21645-51-2	Aluminum hydroxide
8001-79-4	Castor oil
13674-84-5	tris(2-chlorisopropyl)-phosphate
25265-71-8	Dipropylene glycol
1318-02-1	Zeolites
67762-90-7	Siloxanes and Silicones, di-Me, reaction products with silica
1333-86-4	Carbon black
77-58-7	Dibutyltin dilaurate

· **European Pre-registered substances:**	
21645-51-2	Aluminum hydroxide
8001-79-4	Castor oil
13674-84-5	tris(2-chlorisopropyl)-phosphate
25265-71-8	Dipropylene glycol
1318-02-1	Zeolites
67762-90-7	Siloxanes and Silicones, di-Me, reaction products with silica
1333-86-4	Carbon black
77-58-7	Dibutyltin dilaurate

· **REACh - Substances of Very High Concern (SVHC) List:**
None of the ingredients is listed.

· **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.

· **Department Issuing (M)SDS:** Product Safety Department
· **Contact:** msds@resinlab.com

· **Abbreviations and acronyms:**
ACGIH: American Conference of Governmental Industrial Hygienists
ACToR: US EPA Aggregated Computational Toxicology Resource
ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road
BCF: Bioconcentration Factor
CAS: Chemical Abstracts Service (division of the American Chemical Society)
CCRIS: US NLM TOXNET Chemical Carcinogenesis Research Information System

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CHRIP: Japan NITE Information on Biodegradation and Bioconcentration of the Existing Chemical Substances in the Chemical Risk Information Platform
DOT: US Department of Transportation
DSL: Canada Domestic Substance List
ESIS: European Chemical Substances Information System
HMIS: US National Paint & Coatings Association (NPCA) Hazardous Materials Identification System
HSDB: US NLM TOXNET Hazardous Substances Databank
HSNO CCID: New Zealand Hazardous Substances and New Organisms Chemical Classification Information Database
IARC: International Agency for Research on Cancer developed by United Nations World Health Organisation (WHO)
IATA-DGR: Dangerous Goods Regulations (DGR) by the International Air Transport Association (IATA)
ICAO-TI: Technical Instructions (TI) by the International Civil Aviation Organization (ICAO)
ICSC: International Chemical Safety Cards
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)
Koc: Partition coefficient, soil Organic Carbon to water
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
NITE: National Institute of Technology and Evaluation, Japan
OECD: Organisation for Economic Co-operation and Development
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
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
SARA: US Superfund Amendments and Reauthorization Act
SIDS: OECD existing chemicals Screening Information Data Sets
SIDS SIAM(R): SIDS Initial Assessment Meetings(Reports)
SVHC: EU ECHA Substance of Very High Concern
TEEL: Temporary Emergency Exposure Limit developed by US Subcommittee on Consequence Assessment and Protective Actions (SCAPA) of US Department of Energy (DOE)
TOXLINE: US NLM bibliographic database search system
TSCA: US Toxic Substance Control Act
· **Date of preparation / last revision** *09/21/2016 / -*