

SAFETY DATA SHEET**LB AM 100 PURPLE**Version Number 1.1
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Print Date 09/30/2015**SAFETY DATA SHEET****LB AM 100 PURPLE****Section 1. Identification**

GHS product identifier : LB AM 100 PURPLE
Chemical name : Mixture
CAS number : Mixture
Other means of identification : FO20019805
Product type : liquid

Relevant identified uses of the substance or mixture and uses advised against

Product use : Industrial applications. Plastics.

Supplier's details : **POLYONE CORPORATION**
33587 Walker Road, Avon Lake, OH 44012

1 (440) 930-1000 or 1 (866) POLYONE

Emergency telephone number (with hours of operation) : **CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).**CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).

Section 2. Hazards identification

This mixture has not been evaluated as a whole. Information provided on the health effects of this product is based on individual components. All ingredients are bound and potential for hazardous exposure as shipped is minimal. However, some vapors may be released upon heating and the end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect employees from exposure. After handling, always wash hands thoroughly with soap and water.

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3


GHS label elements

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Hazard pictograms	:	
Signal word	:	Danger
Hazard statements	:	Highly flammable liquid and vapour. Causes serious eye irritation. May cause drowsiness or dizziness.
<u>Precautionary statements</u>		
General	:	Not applicable.
Prevention	:	Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash hands thoroughly after handling.
Response	:	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. 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 attention.
Storage	:	Store in a well-ventilated place. Keep cool.
Disposal	:	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	:	None known.
Hazards not otherwise classified	:	None known.

Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Chemical name	:	Mixture
Other means of identification	:	FO20019805

CAS number/other identifiers

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Ingredient name	%	CAS number
Methyl ethyl ketone	10 - 30	78-93-3
Tetrahydrofuran	10 - 30	109-99-9
Bis(2,6-diisopropylphenyl)carbodiimide	1 - 5	2162-74-5
Titanium dioxide	0.1 - 1	13463-67-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim

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to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- | | | |
|---------------------|---|--|
| Eye contact | : | Causes serious eye irritation. |
| Inhalation | : | Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. |
| Skin contact | : | No known significant effects or critical hazards. |
| Ingestion | : | Can cause central nervous system (CNS) depression. Irritating to mouth, throat and stomach. |

Over-exposure signs/symptoms

- | | | |
|---------------------|---|---|
| Eye contact | : | Adverse symptoms may include the following:
pain or irritation
watering
redness |
| Inhalation | : | Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness |
| Skin contact | : | No specific data. |
| Ingestion | : | No specific data. |

Indication of immediate medical attention and special treatment needed, if necessary

- | | | |
|---------------------------|---|---|
| Notes to physician | : | In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. |
|---------------------------|---|---|

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- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.
- Specific hazards arising from the chemical** : Highly flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide

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- adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures

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Advice on general occupational hygiene

against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store in a well-ventilated place. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection
Control parameters
Occupational exposure limits

Ingredient name	Exposure limits
Methyl ethyl ketone	<p>OSHA PEL 1989 (1989-03-01) PEL: Permissible Exposure Level 590 mg/m³ 200 ppm Short Term Exposure Limit value for a 15-minute reference period expressed in parts per million or in mg/m³. 885 mg/m³ 300 ppm</p> <p>OSHA PEL (1993-06-30) PEL: Permissible Exposure Level 590 mg/m³ 200 ppm</p> <p>NIOSH REL (1994-06-01) Time Weighted Average (TWA) 590 mg/m³ 200 ppm Short Term Exposure Limit value for a 15-minute reference period expressed in parts per million or in mg/m³. 885 mg/m³ 300 ppm</p> <p>ACGIH TLV (1994-09-01) TLV-TWA: Threshold Limit Value - Time weighted average PEL: Permissible Exposure Level 590 mg/m³ 200 ppm TLV-STEL: Threshold Limit Value - Short Time Exposure Level 885 mg/m³ 300 ppm</p>

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Tetrahydrofuran	<p>OSHA PEL 1989 (1989-03-01) PEL: Permissible Exposure Level 590 mg/m³ 200 ppm Short Term Exposure Limit value for a 15-minute reference period expressed in parts per million or in mg/m³. 735 mg/m³ 250 ppm</p> <p>OSHA PEL (1993-06-30) PEL: Permissible Exposure Level 590 mg/m³ 200 ppm NIOSH REL (1994-06-01) Time Weighted Average (TWA) 590 mg/m³ 200 ppm Short Term Exposure Limit value for a 15-minute reference period expressed in parts per million or in mg/m³. 735 mg/m³ 250 ppm</p> <p>ACGIH TLV (2005-01-01) TLV-TWA: Threshold Limit Value - Time weighted average PEL: Permissible Exposure Level 50 ppm TLV-STEL: Threshold Limit Value - Short Time Exposure Level 100 ppm</p>
Titanium dioxide	<p>OSHA PEL 1989 (1989-03-01) PEL: Permissible Exposure Level 10 mg/m³ Form: Total dust OSHA PEL (1993-06-30) PEL: Permissible Exposure Level 15 mg/m³ Form: Total dust NIOSH REL (1994-06-01)</p> <p>ACGIH TLV (1996-05-18) TLV-TWA: Threshold Limit Value - Time weighted average PEL: Permissible Exposure Level 10 mg/m³</p>

- Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end

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- of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product., When there is a risk of ignition from static electricity, wear anti-static protective clothing., For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

- Physical state** : liquid [liquid]
Color : PURPLE
Odor : Not available.
Odor threshold : Not available.

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pH	:	Not available.
Melting point	:	Not available.
Boiling point	:	Not available.
Flash point	:	Closed cup: -9 °C (15.80 °F)
Burning time	:	Not available.
Burning rate	:	Not available.
Evaporation rate	:	Not available.
Flammability (solid, gas)	:	Not available.
Lower and upper explosive (flammable) limits	:	Lower: Not available. Upper: Not available.
Vapor pressure	:	Not available.
Vapor density	:	Not available.
Relative density	:	Not available.
Solubility	:	Not available.
Solubility in water	:	Not available.
Partition coefficient: n-octanol/water	:	Not available.
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
SADT	:	Not available.
Viscosity	:	Dynamic: Not available. Kinematic: Not available.

Section 10. Stability and reactivity

Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	:	Stable under recommended storage and handling conditions (see Section 7).
Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	:	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Incompatible materials	:	Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

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This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Methyl ethyl ketone				
	LD50 Oral	Rat	2,737 mg/kg	-
	LC50 Inhalation	Rat	24 mg/l	8 h
	LD50 Dermal	Rabbit	6,480 mg/kg	-
Tetrahydrofuran				
	LD50 Oral	Rat	1,650 mg/kg	-
	LC50 Inhalation	Rat	21000 ppm	3 h
	LC50 Inhalation	Rat	72 mg/l	2 h
Bis(2,6-diisopropylphenyl)carbodiimide				
	LD50 Oral	Rat	200 mg/kg	-
Titanium dioxide				
	LC50 Inhalation	Rat - Male	6.82 Mg/l	4 h
	LD50 Dermal	Rabbit	> 5,000 mg/kg	-

Conclusion/Summary : Mixture.Not fully tested.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Methyl ethyl ketone	Skin - Moderate irritant	Rabbit		24 hrs	-

Conclusion/Summary

Skin : Mixture.Not fully tested.
Eyes : Mixture.Not fully tested.
Respiratory : Mixture.Not fully tested.

Sensitization

Conclusion/Summary

Skin : Mixture.Not fully tested.
Respiratory : Mixture.Not fully tested.

Mutagenicity

Conclusion/Summary : Mixture.Not fully tested.

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Carcinogenicity

Conclusion/Summary : Mixture.Not fully tested.

Classification

Product/ingredient name	OSHA	IARC	NTP
Titanium dioxide		2B	

Reproductive toxicity

Conclusion/Summary : Mixture.Not fully tested.

Teratogenicity

Conclusion/Summary : Mixture.Not fully tested.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Methyl ethyl ketone	Category 3		Narcotic effects

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.
Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Skin contact : No known significant effects or critical hazards.
Ingestion : Can cause central nervous system (CNS) depression., Irritating to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain or irritation

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	watering
	redness
Inhalation	: Adverse symptoms may include the following:
	nausea or vomiting
	headache
	drowsiness/fatigue
	dizziness/vertigo
	unconsciousness
Skin contact	: No specific data.
Ingestion	: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects	: Not available.
Potential delayed effects	: Not available.

Long term exposure

Potential immediate effects	: Not available.
Potential delayed effects	: Not available.

Potential chronic health effects

Conclusion/Summary	: Mixture. Not fully tested.
General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	2,680.1 mg/kg

Section 12. Ecological information

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Toxicity

Product/ingredient name	Result	Species	Exposure
Methyl ethyl ketone			
	Acute LC50 3,220,000 µg/l Fresh water	Fish - Fish	96 h
	Acute LC50 5,600 mg/l Fresh water	Fish - Fish	96 h
	Acute EC50 5,091,000 µg/l Fresh water	Aquatic invertebrates. Daphnia	48 h
	Acute EC50 > 500,000 µg/l Marine water	Aquatic plants - Algae	96 h
	Acute EC50 > 500 mg/l Fresh water	Aquatic plants - Algae	96 h
Tetrahydrofuran			
	Acute LC50 2,160,000 µg/l Fresh water	Fish - Fish	96 h
	Chronic No-observable-effect-concentration 367 mg/l Fresh water	Fish - Fish	33 d
	Chronic No-observable-effect-concentration 717 mg/l Fresh water	Fish - Fish	33 d
Titanium dioxide			
	Acute LC50 > 1,000,000 µg/l Marine water	Fish - Fish	96 h
	Acute LC50 > 1,000 mg/l Fresh water	Fish - Fish	96 h
	Acute LC50 13 mg/l Fresh water	Aquatic invertebrates. Daphnia	48 h
	Acute LC50 6.5 mg/l Fresh water	Aquatic invertebrates. Daphnia	48 h
	Acute EC50 19.3 mg/l Fresh water	Aquatic invertebrates. Daphnia	48 h
	Acute EC50 27.8 mg/l Fresh water	Aquatic invertebrates. Daphnia	48 h
	Acute EC50 35.306 mg/l Fresh water	Aquatic invertebrates. Daphnia	48 h
	Acute LC50 3 mg/l Fresh water	Aquatic invertebrates. Crustacean Order	48 h
	Acute LC50 15.9 mg/l Fresh water	Aquatic invertebrates. Crustacean Order	48 h
	Acute LC50 3.6 mg/l Fresh water	Aquatic invertebrates. Crustacean Order	48 h
	Acute LC50 11 mg/l Fresh water	Aquatic invertebrates. Crustacean Order	48 h

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	Acute LC50 13.4 mg/l Fresh water	Aquatic invertebrates. Crustacean Order	48 h
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Conclusion/Summary : Not available.

Persistence and degradability

Conclusion/Summary : Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Methyl ethyl ketone	0.29	-	low
Tetrahydrofuran	0.45	-	low
Titanium dioxide		352.00	low

Mobility in soil

Soil/water partition coefficient (KOC) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Acute hazardous waste "P" List: Not listed

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United States - RCRA Toxic hazardous waste "U" List: Listed

Ingredient	CAS #	Status	Reference number
Tetrahydrofuran	109-99-9	Listed	
Methyl ethyl ketone	78-93-3	Listed	

Section 14. Transport information

U.S. DOT Classification
 Proper Shipping Name: Flammable liquids, n.o.s.
 Technical Name: butanone,tetrahydrofuran
 Hazard Class / Division 3
 UN Number UN1993
 Packing Group II
 Label Required 3

Hazardous Substance	RQ for Mixture/Product
tetrahydrofuran	

ICAO/IATA Consult mode specific transport rules

IMO/IMDG (maritime) Consult mode specific transport rules

Section 15. Regulatory information

U.S. Federal regulations :

- United States - TSCA 12(b) - Chemical export notification:** None of the components are listed.
- United States - TSCA 4(a) - Final Test Rules:** Listed **1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich Diisononyl phthalate**
- United States - TSCA 4(a) - ITC Priority list:** Not listed
- United States - TSCA 4(a) - Proposed test rules:** Not listed
- United States - TSCA 4(f) - Priority risk review:** Not listed
- United States - TSCA 5(a)2 - Final significant new use rules:** Not listed
- United States - TSCA 5(a)2 - Proposed significant new use rules:** Not listed
- United States - TSCA 5(e) - Substances consent order:** Not listed

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United States - TSCA 6 - Final risk management: Not listed
 United States - TSCA 6 - Proposed risk management: Not listed
 United States - TSCA 8(a) - Chemical risk rules: Not listed
 United States - TSCA 8(a) - Chemical Data Reporting (CDR): Not determined
 United States - TSCA 8(a) - Preliminary assessment report (PAIR): Listed Tetrahydrofuran
 2,6-Diisopropylphenyl isocyanate

United States - TSCA 8(c) - Significant adverse reaction (SAR): Not listed
 United States - TSCA 8(d) - Health and safety studies: Not listed
 United States - TSCA 8(a) - Dioxin/Furane precursor: Not listed
 United States - EPA Clean water act (CWA) section 307 - Priority pollutants: Listed Benzene, methyl-

United States - EPA Clean water act (CWA) section 311 - Hazardous substances: Listed
 United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Flammable substances: Not listed
 United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Toxic substances: Not listed
 United States - Department of commerce - Precursor chemical: Not listed

Clean Air Act Section 112(b) : Not listed
 Hazardous Air Pollutants (HAPs)
 Clean Air Act Section 602 Class I Substances : Not listed
 Clean Air Act Section 602 Class II Substances : Not listed
 DEA List I Chemicals (Precursor Chemicals) : Not listed
 DEA List II Chemicals (Essential Chemicals) : Listed

US. EPA CERCLA Hazardous Substances (40 CFR 302)

Chemical Name	CAS-No.	RQ for component
Tetrahydrofuran	109-99-9	1,000 lb(s) 454 kg

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Methyl ethyl ketone	78-93-3	5,000 lb(s) 2,270 kg 2,270 kg 5,000 lb(s)
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SARA 311/312

Classification : Fire hazard
Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Classification
Methyl ethyl ketone	10 - 30	F, AH
Tetrahydrofuran	10 - 30	F, AH
Bis(2,6-diisopropylphenyl)carbodiimide	1 - 5	AH
Titanium dioxide	0.1 - 1	CH

SARA 313

Not applicable.

State regulations

Massachusetts : The following components are listed:
Tetrahydrofuran
Methyl ethyl ketone

New York : The following components are listed:
Tetrahydrofuran
Methyl ethyl ketone

New Jersey : The following components are listed:
Tetrahydrofuran
Methyl ethyl ketone
Titanium dioxide

Pennsylvania : The following components are listed:
Tetrahydrofuran

Methyl ethyl ketone

Titanium dioxide

California Prop. 65

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WARNING: This product contains a chemical known to the State of California to cause cancer., WARNING: This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

United States inventory (TSCA 8b) : All components are listed or exempted.

Canada inventory : All components are listed or exempted.

International regulations

International lists :

- Australia inventory (AICS):** Not determined.
- Taiwan inventory (CSNN):** Not determined.
- Malaysia Inventory (EHS Register):** Not determined.
- EINECS:** All components are listed or exempted.
- Japan inventory:** Not determined.
- China inventory (IECSC):** Not determined.
- Korea inventory:** Not determined.
- New Zealand Inventory of Chemicals (NZIoC):** Not determined.
- Philippines inventory (PICCS):** Not determined.

Chemical Weapons Convention List Schedule I Chemicals : Not listed

Chemical Weapons Convention List Schedule II Chemicals : Not listed

Chemical Weapons Convention List Schedule III Chemicals : Not listed

Section 16. Other information

History

Date of printing : 09/30/2015
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Version : 1.1

Key to abbreviations :

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- UN = United Nations

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References : Not available.

Notice to reader

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