

UV Booster

Section 1. Identification

GHS product identifier : UV Booster

Other means of identification : Not available.

Product type : Liquid.

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

Product use : Additive to increase the UV protection properties of paver Protectors.

Area of application : Consumer applications, Industrial applications.

Supplier/Manufacturer : Techniseal
300, avenue Liberté
Candiac, QC, Canada, J5R 6X1
Tel: (514) 523-2110
Toll free: 1-800-465-7325
Fax: (450) 633-3035

e-mail address of person responsible for this SDS : service@techniseal.com

Emergency telephone number (with hours of operation) : CANUTEC (613) 996-6666

Section 2. Hazards identification

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

Classification of the substance or mixture : H225 FLAMMABLE LIQUIDS - Category 2
H315 SKIN IRRITATION - Category 2
H319 EYE IRRITATION - Category 2A
H317 SKIN SENSITIZATION - Category 1
H351 CARCINOGENICITY - Category 2
H360 TOXIC TO REPRODUCTION (Unborn child) - Category 1B
H361 TOXIC TO REPRODUCTION (Fertility) - Category 2
H335 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
H336 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
H373 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (blood system) - Category 2
H304 ASPIRATION HAZARD - Category 1
Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 34.5%

GHS label elements

Hazard pictograms : 

Signal word : Danger

Section 2. Hazards identification

- Hazard statements** : H225 - Highly flammable liquid and vapor.
H319 - Causes serious eye irritation.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H360 - May damage the unborn child.
H361 - Suspected of damaging fertility.
H351 - Suspected of causing cancer.
H304 - May be fatal if swallowed and enters airways.
H335 - May cause respiratory irritation.
H336 - May cause drowsiness and dizziness.
H373 - May cause damage to organs through prolonged or repeated exposure. (blood system)
- Precautionary statements**
- General** : P103 - Read label before use.
P102 - Keep out of reach of children.
P101 - If medical advice is needed, have product container or label at hand.
- Prevention** : P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P241 - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
P233 - Keep container tightly closed.
P271 - Use only outdoors or in a well-ventilated area.
P260 - Do not breathe vapor.
P264 - Wash hands thoroughly after handling.
P272 (OSHA) - Contaminated work clothing must not be allowed out of the workplace.
- Response** : P314 - Get medical attention if you feel unwell.
P308 + P313 - IF exposed or concerned: Get medical attention.
P304 + P340 + P312 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.
P301 + P310 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P302 + P352 + P363 - IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse.
P333 + P313 - If skin irritation or rash occurs: Get medical attention.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 - If eye irritation persists: Get medical attention.
- Storage** : P405 - Store locked up.
P403 - Store in a well-ventilated place.
P235 - Keep cool.
- Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** : Avoid contact with skin and clothing. Wash thoroughly after handling.
- Hazards not otherwise classified** : Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture
Other means of identification : Not available.

CAS number/other identifiers

CAS number : Not applicable.
Product code : 241-890/121-890

Ingredient name	Other names	%	CAS number
acetone	-	≥25 - <50	67-64-1
Solvent naphtha (petroleum), light arom.	-	≥25 - <50	64742-95-6
1,2,4-trimethylbenzene	-	≥5 - <10	95-63-6
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	-	≥3 - <5	41556-26-7
BBP	-	≥1 - <3	85-68-7
xylene	-	≥0.3 - <1	1330-20-7
cumene	-	≥0.1 - <0.3	98-82-8

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 and hence require reporting in this section.

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** : Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim 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. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. 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.

Section 4. First aid measures

- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness. May cause respiratory irritation.
- Skin contact** : Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
dryness
cracking
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
nausea or vomiting
reduced fetal weight
increase in fetal deaths
skeletal malformations

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.
- 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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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.

Section 5. Fire-fighting measures

- Specific hazards arising from the chemical** : Highly flammable liquid and vapor. 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 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). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. 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

Section 7. Handling and storage

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

Advice on general occupational hygiene

: 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 locked up. 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
acetone	<p>ACGIH TLV (United States, 4/2014). TWA: 500 ppm 8 hours. TWA: 1188 mg/m³ 8 hours. STEL: 750 ppm 15 minutes. STEL: 1782 mg/m³ 15 minutes.</p> <p>OSHA PEL 1989 (United States, 3/1989). TWA: 750 ppm 8 hours. TWA: 1800 mg/m³ 8 hours. STEL: 1000 ppm 15 minutes. STEL: 2400 mg/m³ 15 minutes.</p> <p>NIOSH REL (United States, 10/2013). TWA: 250 ppm 10 hours. TWA: 590 mg/m³ 10 hours.</p> <p>OSHA PEL (United States, 2/2013). TWA: 1000 ppm 8 hours. TWA: 2400 mg/m³ 8 hours.</p>
Solvent naphtha (petroleum), light arom.	<p>ACGIH TLV (United States, 4/2014). TWA: 5 mg/m³ 8 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist</p>
1,2,4-trimethylbenzene	<p>ACGIH TLV (United States, 4/2014). TWA: 25 ppm 8 hours. TWA: 123 mg/m³ 8 hours.</p> <p>OSHA PEL 1989 (United States, 3/1989). TWA: 25 ppm 8 hours. TWA: 125 mg/m³ 8 hours.</p> <p>NIOSH REL (United States, 10/2013). TWA: 25 ppm 10 hours. TWA: 125 mg/m³ 10 hours.</p>
xylene	<p>ACGIH TLV (United States, 4/2014). TWA: 100 ppm 8 hours. TWA: 434 mg/m³ 8 hours. STEL: 150 ppm 15 minutes. STEL: 651 mg/m³ 15 minutes.</p> <p>OSHA PEL 1989 (United States, 3/1989).</p>

Section 8. Exposure controls/personal protection

cumene

STEL: 150 ppm 15 minutes.
 STEL: 655 mg/m³ 15 minutes.
 TWA: 100 ppm 8 hours.
 TWA: 435 mg/m³ 8 hours.
OSHA PEL (United States, 2/2013).
 TWA: 100 ppm 8 hours.
 TWA: 435 mg/m³ 8 hours.
NIOSH REL (United States, 10/2013).
Absorbed through skin.
 TWA: 50 ppm 10 hours.
 TWA: 245 mg/m³ 10 hours.
ACGIH TLV (United States, 4/2014).
 TWA: 50 ppm 8 hours.
OSHA PEL (United States, 2/2013).
Absorbed through skin.
 TWA: 50 ppm 8 hours.
 TWA: 245 mg/m³ 8 hours.
OSHA PEL 1989 (United States, 3/1989).
Absorbed through skin.
 TWA: 50 ppm 8 hours.
 TWA: 245 mg/m³ 8 hours.

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 of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. 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.

Section 8. Exposure controls/personal protection

- 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. [Clear.]
- Color** : Not available.
- Odor** : Hydrocarbon.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : <-50°C (<-58°F)
- Boiling point** : >150°C (>302°F)
- Flash point** : Closed cup: <4°C (<39.2°F)
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not applicable.
- Lower and upper explosive (flammable) limits** : 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 (room temperature): 30 mPa·s (30 cP)
- Density** : 0.883 g/cm³
- Physical/chemical properties comments** : VOC content: <395 g/l

Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
Under normal conditions of storage and use, hazardous polymerization 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: acids and alkalis.

Section 10. Stability and reactivity

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

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
acetone	LC50 Inhalation Dusts and mists	Rat	76 mg/l	4 hours
	LC50 Inhalation Vapor	Rat - Male	30000 ppm	4 hours
	LD50 Dermal	Rabbit	>15800 mg/kg	-
Solvent naphtha (petroleum), light arom.	LD50 Oral	Rat	5800 mg/kg	-
	LD50 Oral	Rat	8400 mg/kg	-
	LD50 Oral	Rat	8400 mg/kg	-
1,2,4-trimethylbenzene	LC50 Inhalation Dusts and mists	Rat	18000 mg/m ³	4 hours
	LD50 Dermal	Rabbit	>3160 mg/kg	-
	LD50 Oral	Rat	3280 mg/kg	-
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	LD50 Oral	Rat	2369 to 3920 mg/kg	-
	LD50 Dermal	Rabbit	>10000 mg/kg	-
	LD50 Dermal	Rat	6700 mg/kg	-
BBP	LD50 Oral	Rat	2330 mg/kg	-
	LD50 Oral	Rat	2330 mg/kg	-
	LD50 Oral	Rat	2330 mg/kg	-
xylene	LC50 Inhalation Vapor	Rat	5000 ppm	4 hours
	LD50 Dermal	Rabbit	>4200 mg/kg	-
	LD50 Oral	Rat	4300 mg/kg	-
cumene	LC50 Inhalation Vapor	Rat	39000 mg/m ³	4 hours
	LD50 Oral	Rat	1400 mg/kg	-
	LD50 Oral	Rat	1400 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
acetone	Eyes - Mild irritant	Rabbit	-	10 microliters	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Eyes - Severe irritant	Rabbit	-	20 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
xylene	Skin - Mild irritant	Rabbit	-	395 milligrams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 milligrams	-
	Skin - Mild irritant	Rat	-	8 hours 60 microliters	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
cumene	Skin - Moderate irritant	Rabbit	-	100 Percent	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Mild irritant	Rabbit	-	86 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 10 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-

Sensitization

Not available.

Section 11. Toxicological information

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
BBP	-	3	-
xylene	-	3	-
cumene	-	2B	Reasonably anticipated to be a human carcinogen.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
acetone Solvent naphtha (petroleum), light arom.	Category 3 Category 3	Not applicable. Not applicable.	Narcotic effects Respiratory tract irritation and Narcotic effects
1,2,4-trimethylbenzene	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
BBP	Category 3	Not applicable.	Respiratory tract irritation
xylene	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
cumene	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
1,2,4-trimethylbenzene xylene	Category 2 Category 2	Not determined Not determined	blood system hearing organs, kidneys, liver and nervous system
cumene	Category 2	Not determined	blood system, kidneys and liver

Aspiration hazard

Name	Result
Solvent naphtha (petroleum), light arom. 1,2,4-trimethylbenzene xylene cumene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Section 11. Toxicological information

- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness. May cause respiratory irritation.
- Skin contact** : Causes skin irritation. Defatting to the skin. May cause an allergic skin reaction.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
dryness
cracking
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
nausea or vomiting
reduced fetal weight
increase in fetal deaths
skeletal malformations

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

Not available.

- General** : May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : May damage the unborn child.

Section 11. Toxicological information

- Developmental effects** : No known significant effects or critical hazards.
Fertility effects : Suspected of damaging fertility.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	27389.9 mg/kg

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
acetone	Acute EC50 20.565 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute LC50 6000000 µg/l Fresh water	Crustaceans - Gammarus pulex	48 hours
	Acute LC50 10000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 5.54 ml/L Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Chronic NOEC 4.95 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Chronic NOEC 0.016 ml/L Fresh water	Crustaceans - Daphniidae	21 days
	Chronic NOEC 0.1 ml/L Fresh water	Daphnia - Daphnia magna - Neonate	21 days
	Chronic NOEC 5 µg/l Marine water	Fish - Gasterosteus aculeatus - Larvae	42 days
1,2,4-trimethylbenzene	Acute LC50 4910 µg/l Marine water	Crustaceans - Elasmopus pecteniscus - Adult	48 hours
	Acute LC50 7720 µg/l Fresh water	Fish - Pimephales promelas	96 hours
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	Acute LC50 0.97 mg/l	Fish - Lepomis macrochirus	96 hours
	Acute EC50 0.22 ppm Marine water	Algae - Skeletonema costatum	72 hours
BBP	Acute EC50 100 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 1000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 32.3 ppm Marine water	Crustaceans - Americamysis bahia	48 hours
	Acute LC50 510 µg/l Marine water	Fish - Cymatogaster aggregata - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
xylene	Chronic NOEC 0.26 mg/l Fresh water	Daphnia - Daphnia magna	21 days
	Acute LC50 8.5 ppm Marine water	Crustaceans - Palaemonetes pugio - Adult	48 hours
cumene	Acute LC50 3300 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Acute EC50 2600 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 7400 µg/l Fresh water	Crustaceans - Artemia sp. - Nauplii	48 hours
	Acute EC50 10600 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 2700 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours

Persistence and degradability

Section 12. Ecological information

Product/ingredient name	Test	Result	Dose	Inoculum
acetone	OECD 301B Ready Biodegradability - CO ₂ Evolution Test	90.9 % - 28 days	-	-
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	301E Ready Biodegradability - Modified OECD Screening Test	38 % - 28 days	-	-
BBP	301B Ready Biodegradability - CO ₂ Evolution Test	93 % - 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
acetone	-	-	Readily
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	-	-	Inherent
BBP	-	-	Readily
xylene	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
acetone	-0.23	-	low
Solvent naphtha (petroleum), light arom.	-	10 to 2500	high
1,2,4-trimethylbenzene	3.63	243	low
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	0.37	-	low
BBP	4.77	1693.25	high
xylene	3.12	8.1 to 25.9	low
cumene	3.55	94.69	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : 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 Toxic hazardous waste "U" List

Date of issue/Date of revision : 07/24/2015 **Date of previous issue** : No previous validation **Version** : 1 13/17

Section 13. Disposal considerations

Ingredient	CAS #	Status	Reference number
Acetone (I); 2-Propanone (I)	67-64-1	Listed	U002

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	UN1993	UN1993	UN1993
UN proper shipping name	Flammable liquids, n.o.s. (acetone, Solvent naphtha (petroleum), light arom.)	FLAMMABLE LIQUID, N.O.S. (acetone, Solvent naphtha (petroleum), light arom.)	Flammable liquid, n.o.s. (acetone, Solvent naphtha (petroleum), light arom.)
Transport hazard class(es)	3 	3  	3 
Packing group	II	II	II
Environmental hazards	No.	Yes.	No.
Additional information	<p>Reportable quantity 10000 lbs / 4540 kg [1358.3 gal / 5141.6 L] Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.</p> <p>Limited quantity Yes.</p> <p>Packaging instruction Passenger aircraft Quantity limitation: 5 L</p> <p>Cargo aircraft Quantity limitation: 60 L</p> <p>Special provisions IB2, T7, TP1, TP8, TP28</p>	<p>The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.</p> <p>Emergency schedules (EmS) F-E, _S-E_</p> <p>Special provisions 274</p>	<p>The environmentally hazardous substance mark may appear if required by other transportation regulations.</p> <p>Passenger and Cargo Aircraft Quantity limitation: 5 L Packaging instructions: 353</p> <p>Cargo Aircraft OnlyQuantity limitation: 60 L Packaging instructions: 364</p> <p>Limited Quantities - Passenger AircraftQuantity limitation: 1 L Packaging instructions: Y341</p> <p>Special provisions A3</p>

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **United States inventory (TSCA 8b)**: All components are listed or exempted.
Clean Water Act (CWA) 307: BBP
Clean Water Act (CWA) 311: xylene

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

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

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Fire hazard
 Immediate (acute) health hazard
 Delayed (chronic) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
acetone	≥25 - <50	Yes.	No.	No.	Yes.	No.
Solvent naphtha (petroleum), light arom.	≥25 - <50	Yes.	No.	No.	Yes.	No.
1,2,4-trimethylbenzene	≥5 - <10	Yes.	No.	No.	Yes.	Yes.
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	≥3 - <5	No.	No.	No.	Yes.	No.
BBP	≥1 - <3	No.	No.	No.	Yes.	Yes.
xylene	≥0.3 - <1	Yes.	No.	No.	Yes.	Yes.
cumene	≥0.1 - <0.3	Yes.	No.	No.	Yes.	Yes.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	1,2,4-trimethylbenzene	95-63-6	≥5 - <10
Supplier notification	1,2,4-trimethylbenzene	95-63-6	≥5 - <10

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: ACETONE; PSEUDOCUMENE; BUTYL BENZYL PHTHALATE

New York : The following components are listed: Acetone; 2-Propanone; Cumene; Benzene, 1-methylethyl-; Butyl benzyl phthalate

Section 15. Regulatory information

New Jersey : The following components are listed: ACETONE; 2-PROPANONE; PSEUDOCUMENE; 1,2,4-TRIMETHYL BENZENE; CUMENE; BENZENE, (1-METHYLETHYL)-; BUTYL BENZYL PHTHALATE; 1,2-BENZENEDICARBOXYLIC ACID, BUTYL PHENYLMETHYL ESTER

Pennsylvania : The following components are listed: 2-PROPANONE; PSEUDOCUMENE; BENZENE, (1-METHYLETHYL)-; 1,2-BENZENEDICARBOXYLIC ACID, BUTYL PHENYLMETHYL ESTER

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
BBP	No.	Yes.	No.	1200 µg/day (ingestion)
cumene	Yes.	No.	No.	No.

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	2
Flammability	3
Physical hazards	0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)



Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Section 16. Other information

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Procedure used to derive the classification

Classification	Justification
Flam. Liq. 2, H225	On basis of test data
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2A, H319	Calculation method
Skin Sens. 1, H317	Calculation method
Carc. 2, H351	Calculation method
Repr. 1B, H360 (Unborn child)	Calculation method
Repr. 2, H361 (Fertility)	Calculation method
STOT SE 3, H335	Calculation method
STOT SE 3, H336	Calculation method
STOT RE 2, H373 (blood system)	Calculation method
Asp. Tox. 1, H304	Expert judgment

History

Date of issue/Date of revision : 07/24/2015

Date of previous issue : No previous validation

Version : 1

Prepared by : IHS

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

References : HCS (U.S.A.)- Hazard Communication Standard
 International transport regulations

☑ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.