

CYASORB® UV-5411 LIGHT ABSORBER

Revision Date 04/02/2020

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

- Trade name CYASORB® UV-5411 LIGHT ABSORBER

1.2 Relevant identified uses of the substance or mixture and uses advised against**Uses of the Substance / Mixture**

- Plastic additive

1.3 Details of the supplier of the safety data sheet**Company**

CYTEC CANADA INC.
9061 Garner Road, Niagara Falls,
Ontario, Canada L2H 0Y2
Tel: +1-905-356-9000

1.4 Emergency telephone

FOR EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CONTACT CHEMTREC (24-Hour Number): 800-424-9300 within the United States and Canada, or 703-527-3887 for international collect calls.

Disclaimer

The ® indicates a Registered Trademark in the United States and the ™ indicates a trademark in the United States. The mark may also be registered, subject of an application for registration, or a trademark in other countries.

SECTION 2: Hazards identification

Although WHMIS has not adopted the environmental portion of the GHS regulations, this document may include information on environmental effects

2.1 Classification of the substance or mixture**Hazardous Products Regulations (WHMIS 2015)**

Combustible dust, Category 1

May form combustible dust concentrations in air.

2.2 Label elements**Hazardous Products Regulations (WHMIS 2015)****Signal Word**

- Warning

Hazard Statements

- May form combustible dust concentrations in air.

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2.3 Other hazards which do not result in classification

- Risk of dust explosion.
- Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

SECTION 3: Composition/information on ingredients**3.1 Substance**

- Chemical nature 2-(2-Hydroxy-5-t-octylphenyl) benzotriazole

WHMIS Hazardous Ingredients and Impurities

- No ingredients are hazardous.

3.2 Mixture

Not applicable, this product is a substance.

SECTION 4: First aid measures**4.1 Description of first-aid measures****In case of inhalation**

- Move to fresh air.
- Get medical attention immediately if symptoms occur.

In case of skin contact

- Use appropriate protective equipment when treating a contaminated person.

In case of eye contact

- Rinse with running water whilst keeping the eyes wide open.

In case of ingestion

- Do NOT induce vomiting.
- Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed**Symptoms**

- At high concentrations:
- slight irritation
- Cough
- Redness
- Redness of the conjunctiva

Effects

- No hazards to be specially mentioned.
- Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough.
- Risk of nose bleeding
- Irritating to mucous membranes

Repeated or prolonged exposure

- Contact with dust can cause mechanical irritation or drying of the skin.
- Dust contact with the eyes can lead to mechanical irritation.

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- Mechanical irritation from the particulates generated by the product.

4.3 Indication of any immediate medical attention and special treatment needed**Notes to physician**

- When symptoms persist or in all cases of doubt seek medical advice.

SECTION 5: Firefighting measures**5.1 Extinguishing media****Suitable extinguishing media**

- Water spray
- Foam
- Carbon dioxide (CO₂)
- Multipurpose powders

Unsuitable extinguishing media

- High volume water jet

5.2 Special hazards arising from the substance or mixture

- Risk of dust explosion.
- Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
- Under fire conditions:
- Will burn
- On combustion, toxic gases are released.

5.3 Advice for firefighters**Special protective equipment for fire-fighters**

- In the event of fire, wear self-contained breathing apparatus.
- Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing
- For further information refer to section 8 "Exposure controls / personal protection."

Specific fire fighting methods

- Do not use a solid water stream as it may scatter and spread fire.

Further information

- Standard procedure for chemical fires.
- Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
- Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

- Where exposure level is not known, wear approved, positive pressure, self-contained respirator.
- Where exposure level is known, wear approved respirator suitable for level of exposure.
- For further information refer to section 8 "Exposure controls / personal protection."

6.2 Environmental precautions

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- Prevent further leakage or spillage if safe to do so.
- Contain the spilled material by diking.
- Do not let product enter drains.
- Do not allow uncontrolled discharge of product into the environment.

6.3 Methods and materials for containment and cleaning up

- Stop leak if safe to do so.
- Avoid dust formation.
- Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration.
- Sweep up and shovel into suitable containers for disposal.
- Keep in properly labeled containers.
- Keep in suitable, closed containers for disposal.
- After cleaning, flush away traces with water.
- Recover the cleaning water for subsequent disposal.
- Decontaminate tools, equipment and personal protective equipment in a segregated area.
- Dispose of in accordance with local regulations.
- Never return spills in original containers for re-use.

6.4 Reference to other sections

- 7. HANDLING AND STORAGE
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 13. DISPOSAL CONSIDERATIONS

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

- Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.
- Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations.
- Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres.

Hygiene measures

- Handle in accordance with good industrial hygiene and safety practice.
- Wash hands before breaks and at the end of workday.
- When using do not eat, drink or smoke.
- Eye wash bottles or eye wash stations in compliance with applicable standards.

Dust explosion class

- St2

7.2 Conditions for safe storage, including any incompatibilities**Technical measures/Storage conditions**

- Ensure all equipment is electrically grounded before beginning transfer operations.

Requirements for storage rooms and vessels

Recommended storage temperature: 32 - 95 °F (0 - 35 °C)

- To guarantee the quality and properties of the product keep according to Storage temperature and conditions.

7.3 Specific end use(s)

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- no data available

SECTION 8: Exposure controls/personal protection

Introductory Remarks: These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

8.1 Control parameters

- Contains no substances with occupational exposure limit values.

8.2 Exposure controls**Control measures****Engineering measures**

- Provide appropriate exhaust ventilation at places where dust is formed.
- Apply technical measures to comply with the occupational exposure limits.

Individual protection measures**Respiratory protection**

- Keep in a well-ventilated place.
- Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust).
- Keep in a well-ventilated place.
- Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust).

Hand protection

- Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).
- Impervious gloves

Eye protection

- Dust proof goggles, if dusty.
- Eye wash bottles or eye wash stations in compliance with applicable standards.

Skin and body protection

- Dust impervious protective suit

Hygiene measures

- Handle in accordance with good industrial hygiene and safety practice.
- Wash hands before breaks and at the end of workday.
- When using do not eat, drink or smoke.
- Eye wash bottles or eye wash stations in compliance with applicable standards.

SECTION 9: Physical and chemical properties

Physical and Chemical properties here represent typical properties of this product. Contact the business area using the Product information phone number in Section 1 for its exact specifications.

9.1 Information on basic physical and chemical properties

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<u>Appearance</u>	<u>Form:</u> pellets, coarse powder
	<u>Physical state:</u> solid
	<u>Color:</u> off-white
<u>Odor</u>	characteristic
<u>Odor Threshold</u>	No data available
<u>Molecular weight</u>	323 g/mol
<u>pH</u>	Not applicable
<u>Melting point/freezing point</u>	<u>Melting point/range:</u> 214 - 219 °F (101 - 104 °C)
<u>Initial boiling point and boiling range</u>	<u>Boiling point/boiling range:</u> Not applicable
<u>Flash point</u>	Not applicable
<u>Evaporation rate (Butylacetate = 1)</u>	Not applicable
<u>Flammability (solid, gas)</u>	May form combustible dust concentrations in air.
<u>Flammability / Explosive limit</u>	<u>Lower flammability/explosion limit:</u> Type: Lower flammability limit Not applicable <u>Upper flammability/explosion limit:</u> Type: Upper flammability limit Not applicable
<u>Autoignition temperature</u>	811 °F (433 °C)
<u>Vapor pressure</u>	Not applicable
<u>Vapor density</u>	Not applicable
<u>Density</u>	1.18 g/cm ³ (77 °F (25 °C))
<u>Relative density</u>	No data available
<u>Solubility</u>	<u>Water solubility:</u> < 1 mg/l
<u>Partition coefficient: n-octanol/water</u>	log Pow: > 6.5
<u>Decomposition temperature</u>	> 572 °F (> 300 °C)
<u>Viscosity</u>	No data available
<u>Explosive properties</u>	No data available
<u>Oxidizing properties</u>	Not considered as oxidizing.

9.2 Other information

<u>Dust explosion constant</u>	Particle size < 75µm St2
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Minimum ignition energy

3 - 5 mJ

Peroxides

The substance or mixture is not classified as organic peroxide.

SECTION 10: Stability and reactivity**10.1 Reactivity**

- no data available

10.2 Chemical stability

- Stable

10.3 Possibility of hazardous reactions

- no data available

10.4 Conditions to avoid

- no data available

10.5 Incompatible materials

- none

10.6 Hazardous decomposition products**Hazardous decomposition products**

- Carbon monoxide
- Carbon dioxide (CO₂)
- Nitrogen oxides (NO_x)

SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity****Acute oral toxicity**

LD50 : > 10,000 mg/kg - Rat , male
Method: OECD Test Guideline 401
Unpublished internal reports

Acute inhalation toxicity

No data available

Acute dermal toxicity

LD50 > 5,000 mg/kg - Rabbit , male
Method: OECD Test Guideline 402
Unpublished internal reports

Acute toxicity (other routes of administration)

No data available

Skin corrosion/irritation

Rabbit
Not irritating to rabbits on cutaneous application.
Method: OECD Test Guideline 404
Unpublished internal reports

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Serious eye damage/eye irritation

Rabbit
Not irritating to rabbits on ocular application.
Method: OECD Test Guideline 405
Unpublished internal reports

Respiratory or skin sensitization

No data available

Mutagenicity**Genotoxicity in vitro**

Ames test
Strain: Salmonella typhimurium
negative
Unpublished internal reports

In vitro mammalian cell gene mutation test
Strain: CHO
negative
Unpublished internal reports

Chromosome aberration test in vitro
Strain: V79
negative
Unpublished internal reports

Genotoxicity in vivo

No data available

Carcinogenicity

No data available

Toxicity for reproduction and development**Toxicity to reproduction / fertility**

No data available

Developmental Toxicity/Teratogenicity

No data available

STOT**STOT-single exposure**

No data available

STOT-repeated exposure

No data available

Experience with human exposure

No data available

Aspiration toxicity

No data available

SECTION 12: Ecological information**12.1 Toxicity****Aquatic Compartment****Acute toxicity to fish**

LC50 - 96 h : > 100 mg/l - Danio rerio (zebra fish)
static test
Method: OECD Test Guideline 203
Unpublished internal reports

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Acute toxicity to daphnia and other aquatic invertebrates EC50 - 48 h : > 100 mg/l - Daphnia magna (Water flea)
static test
Method: OECD Test Guideline 202
Unpublished internal reports

Toxicity to aquatic plants No data available
Toxicity to microorganisms IC50 - 3 h : > 100 mg/l - activated sludge
Method: OECD Test Guideline 209
Unpublished internal reports

Chronic toxicity to fish No data available

Chronic toxicity to daphnia and other aquatic invertebrates No data available

12.2 Persistence and degradability

Abiotic degradation No data available

Physical- and photo-chemical elimination No data available

Biodegradation**Biodegradability**

Ready biodegradability study:
Method: OECD Test Guideline 301 B
1 % - 28 Days
The substance does not fulfill the criteria for ready biodegradability and ultimate aerobic biodegradability
Unpublished internal reports

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water No data available

Bioconcentration factor (BCF) No data available

12.4 Mobility in soil

Adsorption potential (Koc) No data available

Known distribution to environmental compartments No data available

12.5 Results of PBT and vPvB assessment No data available

12.6 Other adverse effects No data available

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Product Disposal**

- The Company encourages the recycle, recovery and reuse of materials, where permitted. If disposal is necessary, The Company recommends that organic materials, especially when classified as hazardous waste, be disposed of by thermal treatment or incineration at approved facilities. All local and national regulations should be followed.

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SECTION 14: Transport information**TDG**

not regulated

DOT

not regulated

NOM

not regulated

IMDG

not regulated

IATA

not regulated

Note: The above regulatory prescriptions are those valid on the date of publication of this sheet. Given the possible evolution of transportation regulations for hazardous materials, it would be advisable to check their validity with your sales office.

SECTION 15: Regulatory information**15.1 Notification status**

Inventory Information	Status
United States TSCA Inventory	- All substances listed as active on the TSCA inventory
EU. European Registration, Evaluation, Authorisation and Restriction of Chemical (REACH)	- When purchased from a Solvay legal entity based in the EEA ("European Economic Area"), this product is compliant with the registration provisions of the REACH Regulation (EC) No. 1907/2006 as all its components are either excluded, exempt, and/or registered. When purchased from a legal entity outside of the EEA, please contact your local representative for additional information.
Canadian Domestic Substances List (DSL)	- Listed on Inventory
Australia Inventory of Chemical Substances (AICS)	- Listed on Inventory
Japan. CSCL - Inventory of Existing and New Chemical Substances	- Listed on Inventory
Korea. Korean Existing Chemicals Inventory (KECI)	- Listed on Inventory
China. Inventory of Existing Chemical Substances in China (IECSC)	- Listed on Inventory
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	- Listed on Inventory
Taiwan Chemical Substance Inventory (TCSI)	- Listed on Inventory

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New Zealand. Inventory of Chemical Substances

- All components are listed on the NZIOC inventory. The HSNO status of the product has not been assessed.

15.2 National Regulations**Canada. CEPA 1999 Significant New Activity (SNAc) List:**

- No substances are subject to a Significant New Activity Notification.

SECTION 16: Other information**Revision Date:**

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NFPA (National Fire Protection Association) - Classification

Health	1 slight
Flammability	3 serious
Instability or Reactivity	0 minimal

Further information

- Distribute new edition to clients
- Update
- See section 3

Key or legend to abbreviations and acronyms used in the safety data sheet

- ACGIH	American Conference of Governmental Industrial Hygienists
- OSHA	Occupational Safety and Health Administration
- NTP	National Toxicology Program
- IARC	International Agency for Research on Cancer
- NIOSH	National Institute for Occupational Safety and Health
- ADR:	European Agreement on International Carriage of Dangerous Goods by Road.
- ADN:	European Agreement on the International Carriage of Dangerous Goods by Inland
Waterways.	
- RID:	European Agreement concerning the International Carriage of Dangerous Goods by Rail.
- IATA:	International Air Transport Association.
- ICAO-TI:	Technical Specification for Safe Transport of Dangerous Goods by Air.
- IMDG:	International Maritime Dangerous Goods.
- TWA:	Time weighted average
- ATE:	Estimated value of acute toxicity
- EC:	European Community number
- CAS:	Chemical Abstracts Service.
- LD50:	Substance that causes 50% (half) death in the test animals group (Median Fatal Dose).
- LC50:	Substance concentration causing 50% (half) death in the test animals group.
- EC50:	Effective Concentration of the substance causing the maximum of 50%.
- PBT:	Persistent, Bioaccumulative and Toxic substance.
- vPvB:	Very Persistent and Very Bioaccumulative.
- SEA:	Classification, labeling, packaging regulation
- DNEL:	Derived No Effect Level
- PNEC:	Predicted No Effect Concentration
- BHOT:	Specific Target Organ Toxicity

Not all acronyms listed above are referenced in this SDS.

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. Such information is only given as a guidance to help the user handle, use, process, store, transport, dispose, and release the product in satisfactory safety conditions and is not to be considered as a warranty or quality specification. It should be used in conjunction with technical sheets but do not replace them. Thus, the information only relates to the designated specific product and may not be applicable if such product is used in combination with other materials or in any other manufacturing process, unless otherwise specifically indicated. It does not release the user from ensuring he is in conformity with all regulations linked to its activity.