

UV DK GRAY ACETAL

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SAFETY DATA SHEET

UV DK GRAY ACETAL

Section 1. Identification

GHS product identifier : UV DK GRAY ACETAL

Chemical name: MixtureCAS number: MixtureOther means of identification: CC10131795

Product type : solid

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

Product use : Industrial applications. Plastics.

Supplier's details : AVIENT CORPORATION

33587 Walker Road, Avon Lake, OH 44012

1 (440) 930-1000 or 1 (844) 4AVIENT

Emergency telephone number (with hours of operation)

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

SPECIFIC TARGET ORGAN TOXICITY (REPEATED

EXPOSURE) (kidneys, liver) - Category 2

GHS label elements



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Hazard pictograms

Signal word : Warning

Hazard statements: May cause damage to organs through prolonged or repeated exposure.

(kidneys, liver)

Precautionary statements

Not applicable.

Prevention : Do not breathe dust.

Response : Get medical attention if you feel unwell.

Storage : Not applicable.

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.

Not available.

Section 3. Composition/information on ingredients

Substance/mixture: MixtureChemical name: MixtureOther means of identification: CC10131795

CAS number/other identifiers

Ingredient name	%	CAS number
Titanium dioxide	>= 5 - < 10	13463-67-7
Phenol, 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylpropyl)-	>= 5 - < 10	25973-55-1
Carbon black	>= 1 - < 3	1333-86-4

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.



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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

following exposure or if feeling unwell.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable

for breathing. 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 following exposure or if feeling unwell. 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. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. Wash

clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion: 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. 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 following exposure or if feeling unwell. 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: No known significant effects or critical hazards.Inhalation: No known significant effects or critical hazards.Skin contact: No known significant effects or critical hazards.Ingestion: No known significant effects or critical hazards.

Over-exposure signs/symptoms



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Eye contact: No specific data.Inhalation: No specific data.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.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without

suitable training. 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 Unsuitable extinguishing media In case of fire, use water spray (fog), foam, dry chemical or CO_2 .

None known.

Specific hazards arising from the chemical

No specific fire or explosion hazard.

Hazardous thermal decomposition products

: If overheated or burnt, the polymer releases formaldehyde. Decomposition products may include the following materials:

carbon dioxide carbon monoxide nitrogen oxides metal oxide/oxides

Special protective actions for firefighters 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.

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and selfcontained 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



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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. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal

protective equipment.

For emergency responders : If specialized 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 : Move containers from spill area. Avoid dust generation. Do not dry

sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed

waste disposal contractor.

Large spill : Move containers from spill area. Approach release from upwind.

Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. 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. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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, : Store in accordance with local regulations. Store in original container



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including any incompatibilities

protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. 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
Titanium dioxide	OSHA PEL 1989 (1989-03-01) TWA 10 mg/m3 Form: Total dust OSHA PEL (1993-06-30) TWA 15 mg/m3 Form: Total dust ACGIH TLV (1996-05-18) TWA 10 mg/m3
Phenol, 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylpropyl)-	None.
Carbon black	OSHA PEL 1989 (1989-03-01) TWA 3.5 mg/m3 OSHA PEL (1993-06-30) TWA 3.5 mg/m3 NIOSH REL (1994-06-01) TWA 3.5 mg/m3 NIOSH REL (1994-06-01) TWA 0.1 mgPAH/m³ ACGIH TLV (2010-12-06) TWA 3 mg/m3 Form: Inhalable fraction

Appropriate engineering controls

: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

: 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



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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. 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: safety glasses with side-shields.

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.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks

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, particulate filter 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 : solid [Pellets.]

Color : GREY



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Odor Not available. Not available. **Odor threshold** Not available. **Melting point** Not available. **Boiling point** Not available. Flash point Not available. **Burning time** Not available. **Burning rate** Not available. **Evaporation rate** Not available. Flammability (solid, gas) Not available.

Lower and upper explosive : Lower: Not available. (flammable) limits : Upper: Not available.

Vapor pressureNot available.Vapor densityNot available.Relative densityNot available.SolubilityNot available.Solubility in waterNot available.Partition coefficient: n-Not available.

octanol/water

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 : Maintain polymer temperature below 230°C (446°F). Avoid

prolonged exposure at or above recommended processing temperature.

Incompatible materials : Incompatible with strong oxidizers and with strong acids and bases

(decomposes to form formaldehyde). At melt temperatures, acetal resins are incompatible with halogenated polymers such as vinyl (PVC) and any elastomers containing any halogenated polymers. At processing conditions, these materials are mutually destructive and involve rapid degradation. Even small amounts of such contaminants can cause sudden and spontaneous formaldehyde gas formation. Workplace fume well above threshold levels are a likely result. Unsafe pressurization of equipment such as extruder or mold can also result. Thoroughly purge and mechanically clean processing equipment to avoid even trace quantities of halogenated materials from coming in



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contact with the acetal. Prevent contamination of virgin or rework

resin

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
Titanium oxide				
	LC50 Inhalation	Rat - Male	6.82 Mg/l	4 h
	Dusts and mists			
	LD50 Dermal	Rabbit	> 5,000 mg/kg	-
Carbon black				
	LD50 Oral	Rat	15,400 mg/kg	-

Conclusion/Summary : Mixture.Not fully tested.No results available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Titanium oxide	Skin - Mild irritant	Human	-	72 hrs	=

Conclusion/Summary

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

Respiratory : Mixture.

Sensitization

Conclusion/Summary

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

Mutagenicity

Conclusion/Summary : Mixture. Not fully tested.

Carcinogenicity

Conclusion/Summary : Mixture.Not fully tested.

Classification



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Product/ingredient name	OSHA	IARC	NTP
Titanium oxide	-	2B	-
Carbon black	-	2B	-

Reproductive toxicity

Conclusion/Summary : Mixture.Not fully tested.

Teratogenicity

Conclusion/Summary : Mixture.Not fully tested.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Phenol, 2-(2H-benzotriazol-2-yl)-	Category 2	oral	-
4,6-bis(1,1-dimethylpropyl)-			

Aspiration hazard

Not available.

Information on the likely routes of

Not available.

exposure

Potential acute health effects

Eye contact: No known significant effects or critical hazards.Inhalation: No known significant effects or critical hazards.Skin contact: No known significant effects or critical hazards.Ingestion: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: No specific data.Inhalation: No specific data.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



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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.No results available.

General: May cause damage to organs through prolonged or repeated exposure.

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

Other information: 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.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Titanium oxide			
	Acute LC50 > 1,000 Mg/l	Fish - Fundulus heteroclitus	96 h
	Marine water		
	Acute LC50 3 Mg/l Fresh water	Crustaceans - Ceriodaphnia	48 h
		dubia	
	Acute LC50 6.5 Mg/l Fresh	Daphnia - Daphnia pulex	48 h
	water		
Carbon black			
	Acute EC50 37.563 Mg/l Fresh	Daphnia - Daphnia magna	48 h
	water		



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Remarks - Acute - Aquatic	Chemicals are not readily available as they are bound within the polymer matrix.
invertebrates.:	

Conclusion/Summary : Chemicals are not readily available as they are bound within the

polymer matrix.

Persistence and degradability

Conclusion/Summary: Chemicals are not readily available as they are bound within the

polymer matrix.

Conclusion/Summary: Chemicals are not readily available as they are bound within the

polymer matrix.

Bioaccumulative potential

Not available.

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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains

and sewers.



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

<u>United States - RCRA Toxic hazardous waste "U" List:</u> Not listed

Section 14. Transport information

U.S.DOT 49CFR

Ground/Air/Water

: Not regulated for transportation.

International Air

ICAO/IATA

: Consult mode specific transport rules

International Water

IMO/IMDG

: 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: Not listed 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 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) - Dioxin/Furane precusor: Not listed United States - TSCA 8(a) - Chemical Data Reporting (CDR): Not

determined

United States - TSCA 8(a) - Preliminary assessment report

(PAIR): Not listed

United States - TSCA 8(c) - Significant adverse reaction (SAR):

Not listed

United States - TSCA 8(d) - Health and safety studies: Not listed United States - EPA Clean water act (CWA) section 307 - Priority

pollutants: Not listed

United States - EPA Clean water act (CWA) section 311 -

Hazardous substances: Not listed

United States - EPA Clean air act (CAA) section 112 - Accidental



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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)

Hazardous Air Pollutants (HAPs)

Clean Air Act Section 602 Class I

Substances

Clean Air Act Section 602 Class II

Substances

DEA List I Chemicals (Precursor

Chemicals)

DEA List II Chemicals (Essential

Chemicals)

Not listed

Not listed

Not listed

Not listed

Not listed

US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

SARA 311/312

Classification : Delayed (chronic) health hazard

Composition/information on ingredients

Not applicable.

State regulations

Massachusetts : The following components are listed:

Titanium dioxide Carbon black

New York : None of the components are listed.

New Jersey : The following components are listed:

Carbon black Titanium dioxide

Pennsylvania : The following components are listed:

Carbon black

Titanium dioxide

California Prop. 65



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

Canada inventory : All components are listed or exempted.

International regulations

Inventory list

AustraliaAll components are listed or exempted.CanadaAll components are listed or exempted.ChinaAll components are listed or exempted.Europe inventoryAll components are listed or exempted.

Japan : Not determined.

New Zealand: All components are listed or exempted.Philippines: All components are listed or exempted.Republic of Korea: All components are listed or exempted.

Taiwan

Turkey

United States : All components are listed or exempted.

Section 16. Other information

History

Date of printing: 02/27/2021Date of issue/Date of revision: 02/26/2021Date of previous issue: 05/31/2016

Version : 1.8

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 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine

pollution)

UN = United Nations

References : Not available.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed 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.



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Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Particularly this information may not be valid for such material used in conjunction with any other materials or in any process, unless specified in the text.