851G-221 TOPCOAT GRAY



Version Revision Date: SDS Number: Date of last issue: 10/11/2017 6.1 02/07/2018 1346436-00035 Date of first issue: 02/27/2017

SECTION 1. IDENTIFICATION

Product name : 851G-221 TOPCOAT GRAY

SDS-Identcode : 130000127773

Manufacturer or supplier's details

Company name of supplier : The Chemours Company FC, LLC

Address : 1007 Market Street

Wilmington, DE 19899 United States of America (USA)

Telephone : 1-844-773-CHEM (outside the U.S. 1-302-773-1000)

Emergency telephone : Medical emergency: 1-866-595-1473 (outside the U.S. 1-302-

773-2000); Transport emergency: +1-800-424-9300 (outside

the U.S. +1-703-527-3887)

Recommended use of the chemical and restrictions on use

Recommended use : Coatings

Restrictions on use : For professional users only.

Do not use or resell Chemours[™] materials in medical applications involving implantation in the human body or contact with internal body fluids or tissues unless agreed to by Seller in a written agreement covering such use. For further information,

please contact your Chemours representative.

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with 29 CFR 1910.1200

Flammable liquids : Category 3

Eye irritation : Category 2A

Reproductive toxicity : Category 2

Specific target organ

systemic toxicity - repeated

exposure

Category 2 (Central nervous system, Liver, Kidney)

GHS label elements

Hazard pictograms :





Signal Word : Warning

851G-221 TOPCOAT GRAY



Version Revision Date: SDS Number: Date of last issue: 10/11/2017 6.1 02/07/2018 1346436-00035 Date of first issue: 02/27/2017

Hazard Statements : H226 Flammable liquid and vapor.

H319 Causes serious eye irritation.

H361d Suspected of damaging the unborn child.

H373 May cause damage to organs (Central nervous system, Liver, Kidney) through prolonged or repeated exposure.

Precautionary Statements : Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read

and understood.

P210 Keep away from heat/sparks/open flames/hot surfaces.

No smokina.

P233 Keep container tightly closed.

P241 Use explosion-proof electrical/ ventilating/ lighting/ equip-

ment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P260 Do not breathe mist or vapors.

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/ protective clothing/ eye protection/

face protection.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately

all contaminated clothing. Rinse skin with water/shower.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/

attention.

P337 + P313 If eye irritation persists: Get medical advice/ atten-

tion.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste dis-

posal plant.

Additional Labeling

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity: 1.5416 %

Other hazards

The thermal decomposition vapors of fluorinated plastics may cause polymer fume fever with flulike symptoms in humans, especially when smoking contaminated tobacco.

Vapors may form explosive mixture with air.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture





Version Revision Date: SDS Number: Date of last issue: 10/11/2017 6.1 02/07/2018 1346436-00035 Date of first issue: 02/27/2017

Hazardous ingredients

Chemical name	CAS-No.	Concentration (% w/w)
Titanium dioxide	13463-67-7	>= 10 - < 20
2,6,8-Trimethyl-4-	60828-78-6	>= 1 - < 3
nonyloxypolyethyleneoxyethanol		
Inorganic additive	Trade secret	>= 1 - < 5
Toluene	108-88-3	>= 1 - < 5
Solvent naphtha (petroleum), light arom.	64742-95-6	>= 1 - < 5
Sodium lauryl sulfate	73296-89-6	>= 1 - < 3
2-(2-Butoxyethoxy)ethanol	112-34-5	>= 1 - < 5
Xylene	1330-20-7	>= 1 - < 5
Ethylbenzene	100-41-4	>= 0.1 - < 1
Carbon black	1333-86-4	>= 0.1 - < 1

SECTION 4. FIRST AID MEASURES

General advice : In the case of accident or if you feel unwell, seek medical

advice immediately.

When symptoms persist or in all cases of doubt seek medical

advice.

If inhaled : If inhaled, remove to fresh air.

Get medical attention.

In case of skin contact : In case of contact, immediately flush skin with plenty of water.

Remove contaminated clothing and shoes.

Get medical attention. Wash clothing before reuse.

Thoroughly clean shoes before reuse.

In case of eye contact : In case of contact, immediately flush eyes with plenty of water

for at least 15 minutes.

If easy to do, remove contact lens, if worn.

Get medical attention.

If swallowed : If swallowed, DO NOT induce vomiting.

Get medical attention.

Rinse mouth thoroughly with water.

Most important symptoms

and effects, both acute and

delayed

Causes serious eye irritation.

Suspected of damaging the unborn child.

May cause damage to organs through prolonged or repeated

exposure.

Protection of first-aiders : First Aid responders should pay attention to self-protection,

and use the recommended personal protective equipment

when the potential for exposure exists.

Notes to physician : Treat symptomatically and supportively.

SECTION 5. FIRE-FIGHTING MEASURES

851G-221 TOPCOAT GRAY



Version Revision Date: SDS Number: Date of last issue: 10/11/2017 6.1 02/07/2018 1346436-00035 Date of first issue: 02/27/2017

Suitable extinguishing media : Water spray

Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

High volume water jet

Specific hazards during fire

fighting

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

fire.

Flash back possible over considerable distance. Vapors may form explosive mixtures with air.

Exposure to combustion products may be a hazard to health.

Hazardous combustion prod-

ucts

Hydrogen fluoride carbonyl fluoride

potentially toxic fluorinated compounds

aerosolized particulates

Carbon oxides Sulfur oxides Silicon oxides Metal oxides

Chlorine compounds

Specific extinguishing meth-

ods

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment. Use water spray to cool unopened containers.

Remove undamaged containers from fire area if it is safe to do

SO.

Evacuate area.

Special protective equipment :

for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emer-

gency procedures

Remove all sources of ignition.

Use personal protective equipment.

Follow safe handling advice and personal protective

equipment recommendations.

Environmental precautions : Discharge into the environment must be avoided.

Prevent further leakage or spillage if safe to do so.

Prevent spreading over a wide area (e.g., by containment or

oil barriers).

Retain and dispose of contaminated wash water.

Local authorities should be advised if significant spillages

cannot be contained.

Methods and materials for containment and cleaning up

Non-sparking tools should be used.

Soak up with inert absorbent material.

Suppress (knock down) gases/vapors/mists with a water spray

jet.

For large spills, provide diking or other appropriate

851G-221 TOPCOAT GRAY



Version Revision Date: SDS Number: Date of last issue: 10/11/2017 6.1 02/07/2018 1346436-00035 Date of first issue: 02/27/2017

containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate

container.

Clean up remaining materials from spill with suitable

absorbent.

Local or national regulations may apply to releases and disposal of this material, as well as those materials and items

employed in the cleanup of releases. You will need to

determine which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding

certain local or national requirements.

SECTION 7. HANDLING AND STORAGE

Technical measures : See Engineering measures under EXPOSURE

CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation : Use with local exhaust ventilation.

Use only in an area equipped with explosion-proof exhaust ventilation if advised by assessment of the local exposure

potential

Advice on safe handling : Do not get on skin or clothing.

Do not breathe vapors or spray mist.

Do not swallow. Do not get in eyes.

Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure

assessment

Non-sparking tools should be used. Keep container tightly closed.

Keep away from heat and sources of ignition.

Take precautionary measures against static discharges. Take care to prevent spills, waste and minimize release to the

environment.

Conditions for safe storage : Keep in properly labeled containers.

Keep tightly closed.

Keep in a cool, well-ventilated place.

Store in accordance with the particular national regulations.

Keep away from heat and sources of ignition.

Materials to avoid : Do not store with the following product types:

Strong oxidizing agents Organic peroxides Flammable solids Pyrophoric liquids Pyrophoric solids

Self-heating substances and mixtures

Substances and mixtures which in contact with water emit

flammable gases Explosives

Gases

851G-221 TOPCOAT GRAY



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 10/11/2017

 6.1
 02/07/2018
 1346436-00035
 Date of first issue: 02/27/2017

Recommended storage tem- : 5 - 25 °C

perature

Further information on stor- : Do not freeze.

age stability

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Ingredients	CAS-No.	Value type (Form of	Control parameters / Permissible	Basis
Titanium dioxide	13463-67-7	exposure) TWA (total dust)	concentration 15 mg/m ³	OSHA Z-1
		TWA	10 mg/m³ (Titanium dioxide)	ACGIH
Inorganic additive	Trade secret	TWA (Respirable fraction)	1 mg/m³ (Aluminum)	ACGIH
Toluene	108-88-3	TWA	20 ppm	ACGIH
		TWA	100 ppm 375 mg/m ³	NIOSH REL
		ST	150 ppm 560 mg/m ³	NIOSH REL
		TWA	200 ppm	OSHA Z-2
		CEIL	300 ppm	OSHA Z-2
		Peak	500 ppm (10 minutes)	OSHA Z-2
Solvent naphtha (petroleum), light arom.	64742-95-6	TWA	500 ppm 2,000 mg/m ³	OSHA Z-1
2-(2-Butoxyethoxy)ethanol	112-34-5	TWA (Inhalable fraction and vapor)	10 ppm	ACGIH
Xylene	1330-20-7	TWA	100 ppm 435 mg/m³	OSHA Z-1
		TWA	100 ppm	ACGIH
		STEL	150 ppm	ACGIH
Ethylbenzene	100-41-4	TWA	20 ppm	ACGIH
		TWA	100 ppm 435 mg/m ³	OSHA Z-1
		TWA	100 ppm 435 mg/m³	NIOSH REL
		ST	125 ppm 545 mg/m³	NIOSH REL
Carbon black	1333-86-4	TWA	3.5 mg/m ³	NIOSH REL
		TWA	3.5 mg/m ³	OSHA Z-1
		TWA (Inhalable fraction)	3 mg/m³	ACGIH

Hazardous components without workplace control parameters

Ingredients	CAS-No.
2,6,8-Trimethyl-4-	60828-78-6

851G-221 TOPCOAT GRAY



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 10/11/2017

 6.1
 02/07/2018
 1346436-00035
 Date of first issue: 02/27/2017

nonyloxypolyethyleneoxy- ethanol	
Sodium lauryl sulfate	73296-89-6

These substance(s) are inextricably bound in the product and therefore do not contribute to a dust inhalation hazard.

Carbon black

Occupational exposure limits of decomposition products

Ingredients	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Hydrofluoric acid	7664-39-3	TWA	3 ppm 2.5 mg/m ³	NIOSH REL
		С	6 ppm 5 mg/m³	NIOSH REL
		TWA	3 ppm	OSHA Z-2
		TWA	0.5 ppm (Fluorine)	ACGIH
		С	2 ppm (Fluorine)	ACGIH
Carbonyl difluoride	353-50-4	TWA	2 ppm	ACGIH
		STEL	5 ppm	ACGIH
		ST	5 ppm 15 mg/m³	NIOSH REL
		TWA	2 ppm 5 mg/m³	NIOSH REL
Carbon dioxide	124-38-9	TWA	5,000 ppm	ACGIH
		STEL	30,000 ppm	ACGIH
		TWA	5,000 ppm 9,000 mg/m³	OSHA Z-1
		TWA	5,000 ppm 9,000 mg/m³	NIOSH REL
		ST	30,000 ppm 54,000 mg/m ³	NIOSH REL
Carbon monoxide	630-08-0	TWA	25 ppm	ACGIH
		TWA	35 ppm 40 mg/m³	NIOSH REL
		С	200 ppm 229 mg/m³	NIOSH REL
		TWA	50 ppm 55 mg/m³	OSHA Z-1

Biological occupational exposure limits

Ingredients	CAS-No.	Control	Biological	Sam-	Permissible	Basis
		parameters	specimen	pling	concentra-	
				time	tion	
Toluene	108-88-3	Toluene	In blood	Prior to	0.02 mg/l	ACGIH
				last shift	_	BEI
				of work-		





 Version
 Revision Date:
 SDS Number:
 Date of last issue: 10/11/2017

 6.1
 02/07/2018
 1346436-00035
 Date of first issue: 02/27/2017

				week		
		Toluene	Urine	End of shift (As soon as possible after exposure ceases)	0.03 mg/l	ACGIH BEI
		o-Cresol	Urine	End of shift (As soon as possible after exposure ceases)	0.3 mg/g Creatinine	ACGIH BEI
Xylene	1330-20-7	Methylhippu ric acids	Urine	End of shift (As soon as possible after exposure ceases)	1.5 g/g creatinine	ACGIH BEI
Ethylbenzene	100-41-4	Sum of mandelic acid and phenyl glyoxylic acid	Urine	End of shift (As soon as possible after exposure ceases)	0.15 g/g creatinine	ACGIH BEI

Engineering measures

Processing may form hazardous compounds (see section

10).

Minimize workplace exposure concentrations.

Use only in an area equipped with explosion-proof exhaust ventilation if advised by assessment of the local exposure

potential

Use with local exhaust ventilation.

Personal protective equipment

Respiratory protection

General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air

hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other

circumstance where air purifying respirators may not provide

adequate protection.

Hand protection

Material : Chemical-resistant gloves

851G-221 TOPCOAT GRAY



Version Revision Date: SDS Number: Date of last issue: 10/11/2017 6.1 02/07/2018 1346436-00035 Date of first issue: 02/27/2017

Remarks : Choose gloves to protect hands against chemicals depending

on the concentration specific to place of work. Breakthrough time is not determined for the product. Change gloves often! For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Take note that the product is flammable, which may impact the selection of hand protection. Wash hands before breaks and at the end of

workday.

Eye protection : Wear the following personal protective equipment:

Safety goggles

Skin and body protection : Select appropriate protective clothing based on chemical

resistance data and an assessment of the local exposure

potential.

Wear the following personal protective equipment: Flame retardant antistatic protective clothing, unless assessment demonstrates that the risk of explosive

atmospheres or flash fires is low

Skin contact must be avoided by using impervious protective

clothing (gloves, aprons, boots, etc).

Hygiene measures : Ensure that eye flushing systems and safety showers are

located close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Color : gray

Odor : No data available

Odor Threshold : No data available

pH : 8.5 - 11

Melting point/freezing point : No data available

Initial boiling point and boiling :

range

> 100 °C

Flash point : 23.89 °C

Method: ISO 2719

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

851G-221 TOPCOAT GRAY



Version Revision Date: SDS Number: Date of last issue: 10/11/2017 6.1 02/07/2018 1346436-00035 Date of first issue: 02/27/2017

Flammability (liquids) : Ignitable (see flash point)

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower

flammability limit

No data available

Vapor pressure : No data available

Relative vapor density : No data available

Density : 1.3530 g/cm³

Solubility(ies)

Water solubility : soluble

Partition coefficient: n-

octanol/water

Not applicable

Autoignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, dynamic : 1 mPa.s

Viscosity, kinematic : No data available

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Particle size : Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not classified as a reactivity hazard.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reac-

tions

Flammable liquid and vapor.

Vapors may form explosive mixture with air. Can react with strong oxidizing agents.

Hazardous decomposition products will be formed at elevated

temperatures.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Oxidizing agents

Hazardous decomposition products

Thermal decomposition : Hydrofluoric acid

Carbonyl difluoride

851G-221 TOPCOAT GRAY



Version Revision Date: SDS Number: Date of last issue: 10/11/2017 6.1 02/07/2018 1346436-00035 Date of first issue: 02/27/2017

Carbon dioxide
Carbon monoxide

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation Skin contact Ingestion Eye contact

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : Acute toxicity estimate: > 5,000 mg/kg

Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: > 200 mg/l

Exposure time: 4 h
Test atmosphere: vapor
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 5,000 mg/kg

Method: Calculation method

Ingredients:

Titanium dioxide:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Method: OECD Test Guideline 425

Acute inhalation toxicity : LC50 (Rat): > 6.82 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50 (Rabbit): > 10,000 mg/kg

2,6,8-Trimethyl-4-nonyloxypolyethyleneoxyethanol:

Acute oral toxicity : LD50 (Rat): 3,300 mg/kg

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

Inorganic additive:

Acute oral toxicity : LD50 (Rat, female): > 2,000 mg/kg

Method: OECD Test Guideline 423

Assessment: The substance or mixture has no acute oral tox-

icity

851G-221 TOPCOAT GRAY



Version Revision Date: SDS Number: Date of last issue: 10/11/2017 6.1 02/07/2018 1346436-00035 Date of first issue: 02/27/2017

Toluene:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): 28.1 mg/l

Exposure time: 4 h
Test atmosphere: vapor

Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

Solvent naphtha (petroleum), light arom.:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 5.6 mg/l

Exposure time: 4 h
Test atmosphere: vapor

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

Assessment: The substance or mixture has no acute dermal

toxicity

Sodium lauryl sulfate:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

Assessment: The substance or mixture has no acute dermal

toxicity

Remarks: Based on data from similar materials

2-(2-Butoxyethoxy)ethanol:

Acute oral toxicity : LD50 (Mouse): 2,410 mg/kg

Method: OECD Test Guideline 401

LD50 (Rat): 3,306 mg/kg

Acute dermal toxicity : LD50 (Rabbit): 2,764 mg/kg

Method: OECD Test Guideline 402

Xylene:

Acute oral toxicity : LD50 (Rat): 4,300 mg/kg

Method: Directive 67/548/EEC, Annex V, B.1.

Acute inhalation toxicity : LC50 (Rat): 27.5 mg/l

Exposure time: 4 h
Test atmosphere: vapor

Acute toxicity estimate: 11 mg/l

Exposure time: 4 h
Test atmosphere: vapor
Method: Expert judgment

851G-221 TOPCOAT GRAY



Version Revision Date: SDS Number: Date of last issue: 10/11/2017 6.1 02/07/2018 1346436-00035 Date of first issue: 02/27/2017

Remarks: Based on harmonised classification in EU regulation

1272/2008, Annex VI

Acute dermal toxicity : Acute toxicity estimate: 1,100 mg/kg

Method: Expert judgment

Remarks: Based on harmonised classification in EU regulation

1272/2008, Annex VI

Ethylbenzene:

Acute oral toxicity : LD50 (Rat): 3,500 mg/kg

Acute inhalation toxicity : LC50 (Rat): 17.2 mg/l

Exposure time: 4 h
Test atmosphere: vapor

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

Carbon black:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 0.0046 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): > 3,000 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Ingredients:

Titanium dioxide:

Species: Rabbit

Method: OECD Test Guideline 404

Result: No skin irritation

2,6,8-Trimethyl-4-nonyloxypolyethyleneoxyethanol:

Result: Skin irritation

Inorganic additive:

Species: Rabbit

Result: No skin irritation

Toluene:

Species: Rabbit

Method: Directive 67/548/EEC, Annex V, B.4.

Result: Skin irritation

Solvent naphtha (petroleum), light arom.:

Species: Rabbit

851G-221 TOPCOAT GRAY



Version Revision Date: SDS Number: Date of last issue: 10/11/2017 6.1 02/07/2018 1346436-00035 Date of first issue: 02/27/2017

Method: OECD Test Guideline 404

Result: Skin irritation

Sodium lauryl sulfate:

Species: Rabbit

Method: OECD Test Guideline 404

Result: Skin irritation

Remarks: Based on data from similar materials

2-(2-Butoxyethoxy)ethanol:

Species: Rabbit

Method: OECD Test Guideline 404

Result: Mild skin irritation

Xylene:

Species: Rabbit Result: Skin irritation

Carbon black:

Species: Rabbit

Result: No skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation.

Ingredients:

Titanium dioxide:

Species: Rabbit

Result: No eye irritation

Method: OECD Test Guideline 405

2,6,8-Trimethyl-4-nonyloxypolyethyleneoxyethanol:

Result: Irreversible effects on the eye

Toluene:

Species: Rabbit

Result: No eye irritation

Method: OECD Test Guideline 405

Solvent naphtha (petroleum), light arom.:

Species: Rabbit

Result: No eye irritation

Sodium lauryl sulfate:

Species: Rabbit

Result: Irreversible effects on the eye Method: OECD Test Guideline 405

Remarks: Based on data from similar materials

851G-221 TOPCOAT GRAY



Version Revision Date: SDS Number: Date of last issue: 10/11/2017 6.1 02/07/2018 1346436-00035 Date of first issue: 02/27/2017

2-(2-Butoxyethoxy)ethanol:

Species: Rabbit

Result: Irritation to eyes, reversing within 21 days

Method: OECD Test Guideline 405

Xylene:

Species: Rabbit

Result: Irritation to eyes, reversing within 7 days

Ethylbenzene:

Species: Rabbit

Result: No eye irritation

Carbon black:

Species: Rabbit

Result: No eye irritation

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Ingredients:

Titanium dioxide:

Routes of exposure: Skin contact

Species: Guinea pig

Method: OECD Test Guideline 406

Result: negative

Inorganic additive:

Test Type: Maximization Test Routes of exposure: Skin contact

Species: Guinea pig

Method: OECD Test Guideline 406

Result: negative

Toluene:

Test Type: Maximization Test Routes of exposure: Skin contact

Species: Guinea pig

Method: OECD Test Guideline 406

Result: negative

Solvent naphtha (petroleum), light arom.:

Test Type: Buehler Test

851G-221 TOPCOAT GRAY



Version Revision Date: SDS Number: Date of last issue: 10/11/2017 6.1 02/07/2018 1346436-00035 Date of first issue: 02/27/2017

Routes of exposure: Skin contact

Species: Guinea pig Result: negative

Sodium lauryl sulfate:

Test Type: Maximization Test Routes of exposure: Skin contact

Species: Guinea pig

Method: OECD Test Guideline 406

Result: negative

Remarks: Based on data from similar materials

2-(2-Butoxyethoxy)ethanol:

Test Type: Maximization Test Routes of exposure: Skin contact

Species: Guinea pig

Method: OECD Test Guideline 406

Result: negative

Xylene:

Test Type: Local lymph node assay (LLNA)

Routes of exposure: Skin contact

Species: Mouse

Method: OECD Test Guideline 429

Result: negative

Ethylbenzene:

Test Type: Human repeat insult patch test (HRIPT)

Routes of exposure: Skin contact

Result: negative

Carbon black:

Test Type: Buehler Test

Routes of exposure: Skin contact

Species: Guinea pig

Method: OECD Test Guideline 406

Result: negative

Germ cell mutagenicity

Not classified based on available information.

Ingredients:

Titanium dioxide:

Germ cell mutagenicity -

Weight of evidence does not support classification as a germ

Assessment cell mutagen.

Inorganic additive:

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test

Method: OECD Test Guideline 476

851G-221 TOPCOAT GRAY



Version Revision Date: SDS Number: Date of last issue: 10/11/2017 6.1 02/07/2018 1346436-00035 Date of first issue: 02/27/2017

Result: negative

Test Type: Chromosome aberration test in vitro

Method: OECD Test Guideline 473

Result: negative

Test Type: Bacterial reverse mutation assay (AMES)

Method: OECD Test Guideline 471

Result: negative

Toluene:

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test

Result: negative

Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Genotoxicity in vivo : Test Type: Mutagenicity (in vivo mammalian bone-marrow

cytogenetic test, chromosomal analysis)

Species: Mouse

Application Route: Ingestion

Result: negative

Solvent naphtha (petroleum), light arom.:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Method: OECD Test Guideline 471

Result: negative

Genotoxicity in vivo : Test Type: Mutagenicity (in vivo mammalian bone-marrow

cytogenetic test, chromosomal analysis)

Species: Rat

Application Route: Intraperitoneal injection

Result: negative

Sodium lauryl sulfate:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Method: OECD Test Guideline 471

Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo

cytogenetic assay) Species: Mouse

Application Route: Ingestion Method: OECD Test Guideline 474

Result: negative

Remarks: Based on data from similar materials

2-(2-Butoxyethoxy)ethanol:

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro

Result: negative

Test Type: Bacterial reverse mutation assay (AMES)





Version Revision Date: SDS Number: Date of last issue: 10/11/2017 6.1 02/07/2018 1346436-00035 Date of first issue: 02/27/2017

Result: negative

Genotoxicity in vivo : Test Type: Mutagenicity (in vivo mammalian bone-marrow

cytogenetic test, chromosomal analysis)

Species: Mouse

Application Route: Ingestion Method: OECD Test Guideline 475

Result: negative

Xylene:

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro

Result: negative

Test Type: In vitro sister chromatid exchange assay in mam-

malian cells Result: negative

Genotoxicity in vivo : Test Type: Rodent dominant lethal test (germ cell) (in vivo)

Species: Mouse

Application Route: Skin contact

Result: negative

Ethylbenzene:

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Method: OECD Test Guideline 476

Result: negative

Genotoxicity in vivo : Test Type: Unscheduled DNA synthesis (UDS) test with

mammalian liver cells in vivo

Species: Mouse

Application Route: Inhalation Method: OECD Test Guideline 486

Result: negative

Carbon black:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Carcinogenicity

Not classified based on available information.

Ingredients:

Titanium dioxide:

Carcinogenicity - Assess-

ment

Weight of evidence does not support classification as a car-

cinogen

Toluene:Species: Rat





Version Revision Date: SDS Number: Date of last issue: 10/11/2017 6.1 02/07/2018 1346436-00035 Date of first issue: 02/27/2017

Application Route: inhalation (vapor)

Exposure time: 24 Months

Result: negative

Solvent naphtha (petroleum), light arom.:

Species: Mouse

Application Route: Skin contact Exposure time: 102 weeks

Result: negative

Sodium lauryl sulfate:

Species: Rat

Application Route: Ingestion Exposure time: 2 Years Result: negative

Remarks: Based on data from similar materials

Xylene:

Species: Rat

Application Route: Ingestion Exposure time: 103 weeks

Result: negative

Ethylbenzene:

Species: Rat

Application Route: Inhalation Exposure time: 104 weeks

Result: positive

Remarks: The mechanism or mode of action may not be relevant in humans.

IARC Group 2B: Possibly carcinogenic to humans

Titanium dioxide 13463-67-7

Ethylbenzene 100-41-4

Carbon black 1333-86-4

OSHA No component of this product present at levels greater than or

equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.

Reproductive toxicity

Suspected of damaging the unborn child.

Ingredients:

Titanium dioxide:

Reproductive toxicity - As- : Weight of evidence does not support classification for

851G-221 TOPCOAT GRAY



Version Revision Date: SDS Number: Date of last issue: 10/11/2017 6.1 02/07/2018 1346436-00035 Date of first issue: 02/27/2017

sessment reproductive toxicity

Inorganic additive:

Effects on fertility : Test Type: Combined repeated dose toxicity study with the

reproduction/developmental toxicity screening test

Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 422

Result: negative

Effects on fetal development : Test Type: Combined repeated dose toxicity study with the

reproduction/developmental toxicity screening test

Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 422

Result: negative

Toluene:

Effects on fertility : Test Type: One-generation reproduction toxicity study

Species: Rat

Application Route: inhalation (vapor)

Result: negative

Effects on fetal development : Test Type: Embryo-fetal development

Species: Rat

Application Route: inhalation (vapor)

Result: positive

Reproductive toxicity - As-

sessment

Some evidence of adverse effects on development, based on

animal experiments.

Solvent naphtha (petroleum), light arom.:

Effects on fertility : Test Type: Two-generation reproduction toxicity study

Species: Rat

Application Route: inhalation (vapor)

Result: negative

Effects on fetal development : Test Type: Embryo-fetal development

Species: Rat

Application Route: inhalation (vapor)

Result: negative

Sodium lauryl sulfate:

Effects on fetal development : Test Type: Embryo-fetal development

Species: Rat

Application Route: Ingestion

Result: negative

Remarks: Based on data from similar materials

2-(2-Butoxyethoxy)ethanol:

Effects on fertility : Test Type: One-generation reproduction toxicity study

851G-221 TOPCOAT GRAY



Version Revision Date: SDS Number: Date of last issue: 10/11/2017 6.1 02/07/2018 1346436-00035 Date of first issue: 02/27/2017

Species: Rat

Application Route: Skin contact Method: OECD Test Guideline 415

Result: negative

Xylene:

Effects on fertility : Test Type: One-generation reproduction toxicity study

Species: Rat

Application Route: inhalation (vapor)

Result: negative

Effects on fetal development : Test Type: Embryo-fetal development

Species: Rat

Application Route: inhalation (vapor)

Result: negative

Ethylbenzene:

Effects on fertility : Test Type: Two-generation reproduction toxicity study

Species: Rat

Application Route: inhalation (vapor) Method: OECD Test Guideline 415

Result: negative

Effects on fetal development : Test Type: Embryo-fetal development

Species: Rat

Application Route: Inhalation Method: OECD Test Guideline 414

Result: negative

STOT-single exposure

Not classified based on available information.

Ingredients:

Toluene:

Assessment: May cause drowsiness or dizziness.

Solvent naphtha (petroleum), light arom.:

Assessment: May cause drowsiness or dizziness.

Xylene:

Assessment: May cause respiratory irritation.

STOT-repeated exposure

May cause damage to organs (Central nervous system, Liver, Kidney) through prolonged or repeated exposure.

Ingredients:

Titanium dioxide:

Assessment: No significant health effects observed in animals at concentrations of 0.2 mg/l/6h/d

851G-221 TOPCOAT GRAY



Version Revision Date: SDS Number: Date of last issue: 10/11/2017 6.1 02/07/2018 1346436-00035 Date of first issue: 02/27/2017

or less.

Toluene:

Target Organs: Central nervous system

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

2-(2-Butoxyethoxy)ethanol:

Routes of exposure: inhalation (vapor)

Assessment: No significant health effects observed in animals at concentrations of 1 mg/l/6h/d or

less.

Xylene:

Routes of exposure: inhalation (vapor)

Target Organs: Central nervous system, Liver, Kidney

Assessment: Shown to produce significant health effects in animals at concentrations of >0.2 to

1 mg/l/6h/d.

Ethylbenzene:

Routes of exposure: inhalation (vapor) Target Organs: Auditory system

Assessment: Shown to produce significant health effects in animals at concentrations of >0.2 to

1 mg/l/6h/d.

Carbon black:

Routes of exposure: inhalation (dust/mist/fume)

Assessment: No significant health effects observed in animals at concentrations of 0.2 mg/l/6h/d

or less.

Repeated dose toxicity

Ingredients:

Titanium dioxide:

Species: Rat

NOAEL: 24,000 mg/kg LOAEL: > 24,000 mg/kg Application Route: Ingestion

Exposure time: 28 d

Remarks: No significant adverse effects were reported

Species: Rat NOAEL: 0.01 mg/l LOAEL: 0.05 mg/l

Application Route: inhalation (dust/mist/fume)

Exposure time: 730 d

Inorganic additive:

Species: Rat

NOAEL: >= 300 mg/kg Application Route: Ingestion

851G-221 TOPCOAT GRAY



Version Revision Date: SDS Number: Date of last issue: 10/11/2017 6.1 02/07/2018 1346436-00035 Date of first issue: 02/27/2017

Exposure time: 42 Days

Method: OECD Test Guideline 422

Toluene:

Species: Rat LOAEL: 1.875 mg/l

Application Route: inhalation (vapor)

Exposure time: 6 Months

Solvent naphtha (petroleum), light arom.:

Species: Rat NOAEL: 1.4 mg/l

Application Route: inhalation (vapor)

Exposure time: 107 Weeks

Sodium lauryl sulfate:

Species: Rat

NOAEL: > 430 mg/kg Application Route: Ingestion Exposure time: 90 Days

Remarks: Based on data from similar materials

2-(2-Butoxyethoxy)ethanol:

Species: Rat

NOAEL: 250 mg/kg

Application Route: Ingestion Exposure time: 90 Days

Method: OECD Test Guideline 408

Species: Rat

NOAEL: >= 0.094 mg/l

Application Route: inhalation (vapor)

Exposure time: 90 Days

Method: OECD Test Guideline 413

Species: Rat

NOAEL: > 2,000 mg/kg

Application Route: Skin contact

Exposure time: 90 Days

Method: OECD Test Guideline 411

Xylene:

Species: Rat NOAEL: 4.35 mg/l

Application Route: inhalation (vapor)

Exposure time: 90 Days

Ethylbenzene:

Species: Rat, female LOAEL: 75 ppm

851G-221 TOPCOAT GRAY



Version Revision Date: SDS Number: Date of last issue: 10/11/2017 6.1 02/07/2018 1346436-00035 Date of first issue: 02/27/2017

Application Route: inhalation (vapor)

Exposure time: 104 Weeks

Carbon black:

Species: Rat NOAEL: 1 mg/kg LOAEL: 7 mg/kg

Application Route: inhalation (dust/mist/fume)

Exposure time: 90 Days

Remarks: These substance(s) are inextricably bound in the product and therefore do not

contribute to a dust inhalation hazard.

Aspiration toxicity

Not classified based on available information.

Ingredients:

Toluene:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

Solvent naphtha (petroleum), light arom.:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

Xylene:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

Ethylbenzene:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

Experience with human exposure

Ingredients:

Toluene:

Inhalation : Target Organs: Central nervous system

Symptoms: Neurological disorders, Fatigue, Vertigo

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Ingredients:

Titanium dioxide:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 1,000 mg/l

Exposure time: 96 h

851G-221 TOPCOAT GRAY



Version Revision Date: SDS Number: Date of last issue: 10/11/2017 6.1 02/07/2018 1346436-00035 Date of first issue: 02/27/2017

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (green algae)): > 100

mg/l

Exposure time: 72 h

NOEC (algae): 5,600 mg/l Exposure time: 72 h

2,6,8-Trimethyl-4-nonyloxypolyethyleneoxyethanol:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 39 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 81.2 mg/l

Exposure time: 48 h

Inorganic additive:

Toxicity to fish : LC50 (Oryzias latipes (Japanese medaka)): > 90 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 21 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae : NOEC (Pseudokirchneriella subcapitata (green algae)): > 99

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

ErC50 (Pseudokirchneriella subcapitata (green algae)): > 99

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): >= 26 mg/l

Exposure time: 21 d

Method: OECD Test Guideline 211

Toluene:

Toxicity to fish : LC50 (Oncorhynchus kisutch (coho salmon)): 5.5 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Ceriodaphnia dubia (water flea)): 3.78 mg/l

Exposure time: 48 h

Toxicity to algae : NOEC (Skeletonema costatum (marine diatom)): 10 mg/l

Exposure time: 72 h

Toxicity to fish (Chronic tox- : NOEC (Oncorhynchus kisutch (coho salmon)): 1.39 mg/l

851G-221 TOPCOAT GRAY



Version Revision Date: SDS Number: Date of last issue: 10/11/2017 6.1 02/07/2018 1346436-00035 Date of first issue: 02/27/2017

icity) Exposure time: 40 d

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 1 mg/l

Exposure time: 21 d

NOEC (Ceriodaphnia dubia (water flea)): 0.74 mg/l

Exposure time: 7 d

Toxicity to microorganisms : EC50 (Nitrosomonas sp.): 84 mg/l

Exposure time: 24 h

Solvent naphtha (petroleum), light arom.:

Toxicity to fish : LL50 (Pimephales promelas (fathead minnow)): 8.2 mg/l

Exposure time: 96 h

Test substance: Water Accommodated Fraction

Toxicity to daphnia and other :

aquatic invertebrates

EL50 (Daphnia magna (Water flea)): 4.5 mg/l

Exposure time: 48 h

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 202

Toxicity to algae : EL50 (Pseudokirchneriella subcapitata (green algae)): 880

mg/l

Exposure time: 72 h

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 201

NOELR (Pseudokirchneriella subcapitata (green algae)): 0.1

mg/l

Exposure time: 72 h

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 201

Toxicity to fish (Chronic tox-

icity)

NOELR (Pimephales promelas (fathead minnow)): 2.6 mg/l

Exposure time: 14 d

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 204

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOELR (Daphnia magna (Water flea)): 2.6 mg/l

Exposure time: 21 d

Test substance: Water Accommodated Fraction

Method: OECD Test Guideline 211

Sodium lauryl sulfate:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 3.6 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Remarks: Based on data from similar materials

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 4.7 mg/l

Exposure time: 48 h

Remarks: Based on data from similar materials

851G-221 TOPCOAT GRAY



Version Revision Date: SDS Number: Date of last issue: 10/11/2017 6.1 02/07/2018 1346436-00035 Date of first issue: 02/27/2017

Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): > 20 mg/l

Exposure time: 72 h

Remarks: Based on data from similar materials

EC10 (Desmodesmus subspicatus (green algae)): 5.4 mg/l

Exposure time: 72 h

Remarks: Based on data from similar materials

Toxicity to fish (Chronic tox-

icity)

NOEC (Pimephales promelas (fathead minnow)): 0.11 mg/l

Exposure time: 34 d

Remarks: Based on data from similar materials

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 0.14 mg/l Exposure time: 21 d

Remarks: Based on data from similar materials

Toxicity to microorganisms : EC10 (Pseudomonas putida): 1,083.85 mg/l

Exposure time: 16 h Method: DIN 38 412 Part 8

Remarks: Based on data from similar materials

2-(2-Butoxyethoxy)ethanol:

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 1,300 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae : NOEC (Desmodesmus subspicatus (green algae)): > 100 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 201

Toxicity to microorganisms : EC10: > 1,995 mg/l

Exposure time: 30 min

Method: OECD Test Guideline 209

Xylene:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 2.6 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Remarks: Based on data from similar materials

Toxicity to daphnia and other :

aquatic invertebrates

IC50 (Daphnia magna (Water flea)): 1 mg/l

Exposure time: 24 h

Method: OECD Test Guideline 202

Remarks: Based on data from similar materials

Toxicity to algae : EC10 (Pseudokirchneriella subcapitata (green algae)): 1.9

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

851G-221 TOPCOAT GRAY



Version **Revision Date:** SDS Number: Date of last issue: 10/11/2017 02/07/2018 1346436-00035 Date of first issue: 02/27/2017 6.1

ErC50 (Pseudokirchneriella subcapitata (green algae)): 4.36

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

Toxicity to fish (Chronic tox-

icity)

NOEC (Oncorhynchus mykiss (rainbow trout)): > 1.3 mg/l

Exposure time: 56 d

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

EC10 (Daphnia magna (Water flea)): 1.91 mg/l

Exposure time: 21 d

Method: OECD Test Guideline 211

Remarks: Based on data from similar materials

Toxicity to microorganisms EC50: > 157 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

Remarks: Based on data from similar materials

Ethylbenzene:

Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout)): 4.2 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 1.8 - 2.4 mg/l

Exposure time: 48 h

EC50 (Pseudokirchneriella subcapitata (green algae)): 5.4 Toxicity to algae

mg/l

Exposure time: 72 h

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC (Ceriodaphnia dubia (water flea)): 0.96 mg/l

Exposure time: 7 d

Toxicity to microorganisms EC50 (Nitrosomonas sp.): 96 mg/l

Exposure time: 24 h

Method: OECD Test Guideline 209

Carbon black:

LC0 (Danio rerio (zebra fish)): 1,000 mg/l Toxicity to fish

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 5,600 mg/l

Exposure time: 24 h

Method: OECD Test Guideline 202

Toxicity to algae NOEC (Desmodesmus subspicatus (green algae)): 10,000

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

851G-221 TOPCOAT GRAY



Version Revision Date: SDS Number: Date of last issue: 10/11/2017 6.1 02/07/2018 1346436-00035 Date of first issue: 02/27/2017

Persistence and degradability

Ingredients:

2,6,8-Trimethyl-4-nonyloxypolyethyleneoxyethanol:

Biodegradability : Result: Not readily biodegradable.

Toluene:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 86 % Exposure time: 20 d

Solvent naphtha (petroleum), light arom.:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 77 % Exposure time: 28 d

Method: OECD Test Guideline 301F

Sodium lauryl sulfate:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 100 % Exposure time: 28 d

Method: OECD Test Guideline 301B

2-(2-Butoxyethoxy)ethanol:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 85 % Exposure time: 28 d

Method: OECD Test Guideline 301C

Xylene:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 87.8 % Exposure time: 28 d

Method: OECD Test Guideline 301F

Remarks: Based on data from similar materials

Ethylbenzene:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 70 - 80 % Exposure time: 28 d

Bioaccumulative potential

Ingredients:

Toluene:

Bioaccumulation : Species: Leuciscus idus (Golden orfe)

Bioconcentration factor (BCF): 90

851G-221 TOPCOAT GRAY



Version Revision Date: SDS Number: Date of last issue: 10/11/2017 6.1 02/07/2018 1346436-00035 Date of first issue: 02/27/2017

Partition coefficient: n-

octanol/water

: log Pow: 2.73

Solvent naphtha (petroleum), light arom.:

Partition coefficient: n-

octanol/water

: log Pow: > 4

Sodium lauryl sulfate:

Partition coefficient: n-

octanol/water

log Pow: <= -2.1

2-(2-Butoxyethoxy)ethanol:

Partition coefficient: n-

octanol/water

log Pow: 1

Xylene:

Bioaccumulation : Species: Oncorhynchus mykiss (rainbow trout)

Bioconcentration factor (BCF): 5.4 - 25.9

Partition coefficient: n-

octanol/water

log Pow: 3.12 - 3.2

Ethylbenzene:

Bioaccumulation : Species: Fish

Bioconcentration factor (BCF): < 100

Remarks: Based on data from similar materials

Partition coefficient: n-

octanol/water

log Pow: 3.6

Mobility in soil

No data available

Other adverse effects

Product:

Results of PBT and vPvB

assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of in accordance with local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste

handling site for recycling or disposal.

Empty containers retain residue and can be dangerous.

851G-221 TOPCOAT GRAY



Version Revision Date: SDS Number: Date of last issue: 10/11/2017 6.1 02/07/2018 1346436-00035 Date of first issue: 02/27/2017

Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury and/or

death.

If not otherwise specified: Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN number : UN 1263
Proper shipping name : PAINT
Class : 3
Packing group : III
Labels : 3

IATA-DGR

UN/ID No. : UN 1263
Proper shipping name : Paint
Class : 3
Packing group : III

Labels : Flammable Liquids

Packing instruction (cargo : 366

aircraft)

Packing instruction (passen: 355

ger aircraft)

IMDG-Code

UN number : UN 1263 Proper shipping name : PAINT

Class : 3
Packing group : III
Labels : 3
EmS Code : F-E, S-E

Marine pollutant : no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

49 CFR

UN/ID/NA number : UN 1263
Proper shipping name : Paint

Class : 3 Packing group : III

Labels : FLAMMABLE LIQUID

ERG Code : 128 Marine pollutant : no

851G-221 TOPCOAT GRAY



Version Revision Date: SDS Number: Date of last issue: 10/11/2017 6.1 02/07/2018 1346436-00035 Date of first issue: 02/27/2017

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

Ingredients	CAS-No.	Component RQ	Calculated product RQ
		(lbs)	(lbs)
Xylene	1330-20-7	100	8722
Toluene	108-88-3	1000	64441
Ethylbenzene	100-41-4	1000	*

^{*:} Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

Ingredients	CAS-No.	Component RQ	Calculated product RQ
		(lbs)	(lbs)
Formaldehyde	50-00-0	100	*

^{*:} Calculated RQ exceeds reasonably attainable upper limit.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)

Serious eye damage or eye irritation

Reproductive toxicity

Specific target organ toxicity (single or repeated exposure)

SARA 313 : The following components are subject to reporting levels

established by SARA Title III, Section 313:

Toluene 108-88-3 >= 1 - < 5 % 2-(2-112-34-5 >= 1 - < 5 % Butoxyethoxy)ethanol **Xylene** 1330-20-7 >= 1 - < 5 % >= 0.1 - < 1 % Ethylbenzene 100-41-4 2-Butoxyethanol 111-76-2 < 0.1 %

Volatile organic compounds (VOC) content

40 CFR Part 59 National VOC Emission Standards For Automobile Refinish Coatings, Subpart B: Other coatings

VOC content: 6.9 % / 93.35 g/l

US State Regulations

Pennsylvania Right To Know

Water	7732-18-5
Fluoropolymer	Trade secret
Titanium dioxide	13463-67-7
Toluene	108-88-3
Solvent naphtha (petroleum), light arom.	64742-95-6
2-(2-Butoxyethoxy)ethanol	112-34-5
Xylene	1330-20-7
1,2,4-Trimethylbenzene	95-63-6

851G-221 TOPCOAT GRAY



Version	Revision Date:	SDS Number:	Date of last issue: 10/11/2017
6.1	02/07/2018	1346436-00035	Date of first issue: 02/27/2017

Ethylbenzene	100-41-4
Butan-1-ol	71-36-3
Aluminum oxide	1344-28-1
Sodium sulphate	7757-82-6
Cumene	98-82-8
ammonia, aqueous solution	1336-21-6

California Prop. 65

WARNING: This product can expose you to chemicals including Benzene, Titanium dioxide, Cadmium, Formaldehyde, Lead, Diethanolamine, Ethylbenzene, Carbon black, Cumene, which is/are known to the State of California to cause cancer, and Benzene, Toluene, Cadmium, Lead, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

California List of Hazardous Substances

Toluene	108-88-3
Xylene	1330-20-7

California Permissible Exposure Limits for Chemical Contaminants

 Titanium dioxide
 13463-67-7

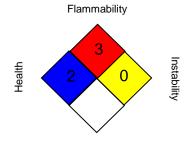
 Toluene
 108-88-3

 Xylene
 1330-20-7

SECTION 16. OTHER INFORMATION

Further information

NFPA:



Special hazard.

HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Chemours™ and the Chemours Logo are trademarks of The Chemours Company. Before use read Chemours safety information.

For further information contact the local Chemours office or nominated distributors. All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI : ACGIH - Biological Exposure Indices (BEI)
NIOSH REL : USA. NIOSH Recommended Exposure Limits





 Version
 Revision Date:
 SDS Number:
 Date of last issue: 10/11/2017

 6.1
 02/07/2018
 1346436-00035
 Date of first issue: 02/27/2017

OSHA Z-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-1 Lim-

its for Air Contaminants

OSHA Z-2 : USA. Occupational Exposure Limits (OSHA) - Table Z-2

ACGIH / TWA : 8-hour, time-weighted average ACGIH / STEL : Short-term exposure limit

ACGIH / C : Ceiling limit

NIOSH REL / TWA : Time-weighted average concentration for up to a 10-hour

workday during a 40-hour workweek

NIOSH REL / ST : STEL - 15-minute TWA exposure that should not be exceeded

at any time during a workday

NIOSH REL / C : Ceiling value not be exceeded at any time.

OSHA Z-1 / TWA : 8-hour time weighted average OSHA Z-2 / TWA : 8-hour time weighted average OSHA Z-2 / CEIL : Acceptable ceiling concentration

OSHA Z-2 / Peak : Acceptable maximum peak above the acceptable ceiling con-

centration for an 8-hr shift

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC -International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG -United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Sources of key data used to compile the Material Safety

Data Sheet

Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen-

cy, http://echa.europa.eu/

Revision Date : 02/07/2018

851G-221 TOPCOAT GRAY



Version Revision Date: SDS Number: Date of last issue: 10/11/2017 6.1 02/07/2018 1346436-00035 Date of first issue: 02/27/2017

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

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. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

US / Z8