

Safety Data Sheet S2084V2-US-SDS

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Issue date: 05/10/2017 Revision date: 10/03/2019 Supersedes: 09/11/2019 Version: 3.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Trade name : SYSTEM 20 CLEARCOAT 2.1 VOC (2:1)

UP Number UP2843

1.2. Recommended use and restrictions on use

Recommended use : Topcoat

Restrictions on use : Consumer uses: Private households (= general public = consumers)

1.3. Supplier

U-POL US Inc 108 Commerce Way

Easton, PA 18040 - United States T 1-800-340-7824 - F 1-800-787-5150 technicalsupport@u-pol.com - www.u-pol.com

1.4. Emergency telephone number

Emergency number : CHEMTREC - 1-800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquids Category 2

Serious eye damage/eye irritation Category 2

Skin sensitization, Category 1

Specific target organ toxicity — Single exposure, Category

Highly flammable liquid and vapor

Causes serious eye irritation

May cause an allergic skin reaction

May cause drowsiness or dizziness

3, Narcosis

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)





Signal word (GHS US) : Danger

Hazard statements (GHS US) : Highly flammable liquid and vapor

May cause an allergic skin reaction Causes serious eye irritation May cause drowsiness or dizziness

Precautionary statements (GHS US) : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

Keep container tightly closed. Use only non-sparking tools.

Take precautionary measures against static discharge.

Avoid breathing vapors, fume. Wash hands thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Contaminated work clothing must not be allowed out of the workplace.

Wear face protection, protective clothing, protective gloves.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower.

If inhaled: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

Call a POISON CENTER if you feel unwell.

If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention.

Wash contaminated clothing before reuse.

In case of fire: Use dry sand, foam, extinguishing powder to extinguish.

07/01/2021 EN (English US) SDS ID: S2084V2-US-SDS Page 1

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Store in a well-ventilated place. Keep cool.

Store locked up.

Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

2.4. Unknown acute toxicity (GHS US)

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
4-chlorobenzotrifluoride	(CAS-No.) 98-56-6	23 – 43	Flam. Liq. 3, H226 Skin Sens. 1, H317 Carc. 2, H351 Aquatic Chronic 2, H411
n-butyl acetate	(CAS-No.) 123-86-4	5 – 23	Flam. Liq. 3, H226 STOT SE 3, H336
acetone	(CAS-No.) 67-64-1	5 – 23	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
heptan-2-one	(CAS-No.) 110-43-0	< 5	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 STOT SE 3, H336
reaction mass of \$\approx\$-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-\$\omega\$-hydroxypoly(oxyethylene) and \$\approx\$-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-\$\omega\$-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)		< 5	Skin Sens. 1A, H317 Aquatic Chronic 2, H411
2-hydroxyethyl methacrylate	(CAS-No.) 868-77-9	< 5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	(CAS-No.) 1065336-91-5	< 5	Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Call a poison center/doctor/physician if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If skin

irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : May cause drowsiness or dizziness. Symptoms/effects after skin contact : May cause an allergic skin reaction.

Symptoms/effects after eye contact : Eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

07/01/2021 EN (English US) SDS ID: S2084V2-US-SDS 2/13

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

5.2. Specific hazards arising from the chemical

Fire hazard : Flammable liquid and vapor.
Reactivity : Flammable liquid and vapor.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting

: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures

: Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing vapors,

spray, fume. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment

: Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment

: Collect spillage.

Methods for cleaning up

Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public

waters.

Other information

: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing vapors, spray, fume. Avoid contact with skin and eyes.

Hygiene measures

: Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures

: Ground/bond container and receiving equipment.

Storage conditions

: Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

n-butyl acetate (123-86-4)		
ACGIH	Local name	n-Butyl acetate
ACGIH	ACGIH OEL TWA [ppm]	50 ppm
ACGIH	ACGIH OEL STEL [ppm]	150 ppm
ACGIH	Remark (ACGIH)	TLV® Basis: Eye & URT irr
ACGIH	Regulatory reference	ACGIH 2021
OSHA	OSHA PEL (TWA) [1]	710 mg/m³
OSHA	OSHA PEL (TWA) [2]	150 ppm
OSHA	Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

07/01/2021 EN (English US) SDS ID: S2084V2-US-SDS 3/13

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2-hydroxyethyl methacrylate (868-77-9)

Not applicable

reaction mass of α -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl- ω -hydroxypoly(oxyethylene) and α -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl- ω -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)

Not applicable

reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate (1065336-91-5) Not applicable

acetone (67-64-1)		
ACGIH	Local name	Acetone
ACGIH	ACGIH OEL TWA [ppm]	250 ppm
ACGIH	ACGIH OEL STEL [ppm]	500 ppm
ACGIH	Remark (ACGIH)	TLV® Basis: URT & eye irr; CNS impair. Notations: A4 (Not classifiable as a Human Carcinogen); BEI
ACGIH	Regulatory reference	ACGIH 2021
OSHA	OSHA PEL (TWA) [1]	2400 mg/m³
OSHA	OSHA PEL (TWA) [2]	1000 ppm
OSHA	Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

4-chlorobenzotrifluoride (98-56-6)

Not applicable

heptan-2-one (110-43-0)		
ACGIH	Local name	Methyl n-amyl ketone
ACGIH	ACGIH OEL TWA [ppm]	50 ppm
ACGIH	Remark (ACGIH)	TLV® Basis: Eye & skin irr
ACGIH	Regulatory reference	ACGIH 2021
OSHA	OSHA PEL (TWA) [1]	465 mg/m³
OSHA	OSHA PEL (TWA) [2]	100 ppm
OSHA	Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



07/01/2021 EN (English US) SDS ID: S2084V2-US-SDS 4/13

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Liquid.
Color : Colorless

Odor : There may be no odour warning properties, odour is subjective and inadequate to warn of

overexposure.

Mixture contains one or more component(s) which have the following odour:

Fruity odour Sweet odour Ester smell Characteristic odour Almost odourless Aromatic odour

Pleasant odour Mild odour Petroleum-like odour Irritating/pungent odour

Odor threshold : No data available pH : No data available Melting point : Not applicable Freezing point : No data available

Boiling point : > 35 °C Flash point : -17 °C

Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : Not applicable. Vapor pressure : No data available Relative vapor density at 20 °C : No data available Relative density : 1.045 – 1.065

Density : 1.055 (1.045 – 1.065) g/cm³

Solubility : No data available Partition coefficient n-octanol/water (Log Pow) : No data available : No data available Auto-ignition temperature Decomposition temperature : No data available No data available Viscosity, kinematic No data available Viscosity, dynamic : No data available **Explosion limits** : No data available Explosive properties : No data available Oxidizing properties : No data available

9.2. Other information

 As Packaged Regulatory VOC
 : 296 g/l (2.5 lb/gal)

 As Packaged Actual VOC
 : 162 g/l (1.3 lb/gal)

 As Applied Regulatory VOC
 : 247 g/l (2.1 lb/gal)

 As Applied Actual VOC
 : 122 g/l (1.02 lb/gal)

 Water Content
 0 wt%

 Exempt Compounds by volume
 : 45.3 vol %

 Exempt Compounds by weight
 : 46.5 wt%

 Volatiles
 : 61.8 wt%

 % EPA HAPS
 : 0.3 wt%

 Percent Solids
 : 38.2 wt%

 Percent Solids
 : 36.73 vol %

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions.

07/01/2021 EN (English US) SDS ID: S2084V2-US-SDS 5/13

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

LD50 oral rat

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Acute toxicity (inhalation)	: Not classified
n-butyl acetate (123-86-4)	
LD50 oral rat	10760 – 12789 mg/kg body weight (Equivalent or similar to OECD 423, Rat, Male / female, Experimental value, Oral)
LD50 dermal rabbit	14112 mg/kg body weight (Equivalent or similar to OECD 402, Rabbit, Male / female, Experimental value, Dermal)
LC50 Inhalation - Rat [ppm]	390 ppm/4h
ATE US (oral)	10760 mg/kg body weight
ATE US (dermal)	14112 mg/kg body weight
ATE US (gases)	390 ppmV/4h
2-hydroxyethyl methacrylate (868-77-	9)
LD50 oral rat	5564 mg/kg body weight Animal: rat, Guideline: other:Appraisal of the safety of chem by the Staff of the Division of Pharmacology, FDA, 1959 in food, drugs and cosmetics
LD50 dermal rabbit	> 5000 mg/kg body weight Animal: rabbit, Animal sex: male
ATE US (oral)	5564 mg/kg body weight
reaction mass of a 2 /2 /2H honzotrio	real 2 vI) 5 test butted 4 budgesymbourd) presioned (1 budgesymboly/overthylene) and s 2 /2 /2U

reaction mass of α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)	
LD50 oral rat	> 5000 mg/kg (OECD Guideline No. 401 (equivalent to Annex V), limit test, rat, male/female)
LD50 dermal rat	> 2000 mg/kg (OECD Guideline No. 402 (equivalent to Annex V), limit test, rat, male/female)
LC50 Inhalation - Rat	5800 mg/l (OECD Guideline 403, 14d, rat)
ATE US (vapors)	5800 mg/l/4h
ATE US (dust_mist)	5800 mg/l/4h

reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate (1065336-91-5)	
LD50 oral rat	3230 mg/kg (OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method), rat, male/female)
LD50 dermal rat	> 3170 mg/kg (OECD Guideline 402 (Acute Dermal Toxicity), read-across,
ATE US (oral) 3230 mg/kg body weight	

acetone (67-64-1)	
LD50 oral rat	5800 mg/kg body weight Animal: rat, Animal sex: female
LD50 dermal rabbit	20000 mg/kg (Equivalent or similar to OECD 402, Rabbit, Male, Experimental value, Dermal)
LC50 Inhalation - Rat	76 mg/l air Animal: rat, Animal sex: female, 95% CL: 65,2 - 88,4
ATE US (oral)	5800 mg/kg body weight
ATE US (dermal)	20000 mg/kg body weight

4-chlorobenzotrifluoride (98-56-6)	
LD50 dermal rabbit	> 3300 mg/kg body weight Animal: rabbit
LC50 Inhalation - Rat	> 32.03 mg/l air Animal: rat, Guideline: EU Method B.2 (Acute Toxicity (Inhalation)), Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
heptan-2-one (110-43-0)	

07/01/2021	EN (English US)	SDS ID: S2084V2-US-SDS	6/13

≈ 1600 mg/kg body weight Animal: rat

Safety Data Sheet

2-hydroxyethyl methacrylate (868-77-9)

LC50 - Fish [1]

LOEC (chronic)

NOEC (chronic)

EC50 - Crustacea [1]

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

	<u> </u>
heptan-2-one (110-43-0)	
LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))
LC50 Inhalation - Rat	> 16.7 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: EU Method B.2 (Acute Toxicity (Inhalation))
ATE US (oral)	500 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Carcinogenicity	. Not classified
4-chlorobenzotrifluoride (98-56-6)	
IARC group	2B - Possibly carcinogenic to humans
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause drowsiness or dizziness.
n-butyl acetate (123-86-4)	
STOT-single exposure	May cause drowsiness or dizziness.
acetone (67-64-1)	
STOT-single exposure	May cause drowsiness or dizziness.
heptan-2-one (110-43-0)	
STOT-single exposure	May cause drowsiness or dizziness.
STOT-repeated exposure	: Not classified
4 chlorobovectriff rounds (00 EC C)	
4-chlorobenzotrifluoride (98-56-6)	150 mg/kg hody weight Animaly rat
LOAEL (oral,rat,90 days)	150 mg/kg body weight Animal: rat
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects	: May cause drowsiness or dizziness.
Symptoms/effects after skin contact	: May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.
	•
SECTION 12: Ecological informa	ition
12.1. Toxicity	· Toyin to aquatic life with long lecting effects
Ecology - general	: Toxic to aquatic life with long lasting effects.
n-butyl acetate (123-86-4)	10 mg/l Test arganisms (angeles), Dimenhalas arganalas
LC50 - Fish [1]	18 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	44 mg/l Test organisms (species): Daphnia sp.
LC50 - Fish [2]	62 mg/l (Leuciscus idus, static system)
NOEC (chronic)	23 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic crustacea	23 mg/l

07/01/2021 EN (English US) SDS ID: S2084V2-US-SDS 7/13

> 100 mg/l Test organisms (species): Oryzias latipes

380 mg/l Test organisms (species): Daphnia magna

49.6 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

24.1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2H- yl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4- le)
LC50 - Fish [1]	2.8 mg/l (96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	4 mg/l (48 h, Daphnia magna, Static system, Fresh water, Experimental value, Nominal concentration)
ErC50 algae	> 100 mg/l (72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)
acetone (67-64-1)	
LC50 - Fish [1]	5540 mg/l (EU Method C.1, 96 h, Salmo gairdneri, Static system, Fresh water, Experimental value, Nominal concentration)
LOEC (chronic)	> 79 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	≥ 79 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
4-chlorobenzotrifluoride (98-56-6)	
LC50 - Fish [1]	3 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
heptan-2-one (110-43-0)	
LC50 - Fish [1]	131 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	> 90.1 mg/l Test organisms (species): Daphnia magna
2.2. Persistence and degradability	
n-butyl acetate (123-86-4)	
Persistence and degradability	Readily biodegradable in water.
ThOD	2.21 g O₂/g substance
BOD (% of ThOD)	0.46
acatona (67 64 1)	
acetone (67-64-1) Persistence and degradability	Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Readily
Tersistence and degradability	biodegradable in water.
Biochemical oxygen demand (BOD)	1.43 g O₂/g substance
Chemical oxygen demand (COD)	1.92 g O₂/g substance
ThOD	2.2 g O₂/g substance
BOD (% of ThOD)	0.872 (20 day(s), Literature study)
4-chlorobenzotrifluoride (98-56-6)	
Persistence and degradability	Biodegradability in water: no data available.
heptan-2-one (110-43-0)	
Persistence and degradability	Readily biodegradable in water.
BOD (% of ThOD)	0.44
2.3. Bioaccumulative potential	
n-butyl acetate (123-86-4)	
BCF - Fish [1]	15.3 (Calculated value)
Partition coefficient n-octanol/water (Log Pow)	2.3 (Test data, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2H-yl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4- e)
BCF - Fish [1]	2658 – 3430 (502 h, Oncorhynchus mykiss, Flow-through system, Fresh water, Experimenta value)
Partition coefficient n-octanol/water (Log Pow)	4.6 (Experimental value, Equivalent or similar to OECD 117, 25 °C)
acetone (67-64-1)	
BCF - Fish [1]	0.69 (Pisces)
BCF - Other aquatic organisms [1]	3 (BCFWIN, Calculated value)
Partition coefficient n-octanol/water (Log Pow)	-0.24 (Test data)
Bioaccumulative potential	Not bioaccumulative.
7/01/2021	EN (English US) SDS ID: S2084V2-US-SDS 8.

07/01/2021 EN (English US) SDS ID: S2084V2-US-SDS 8/13

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

4-chlorobenzotrifluoride (98-56-6)	nlorobenzotrifluoride (98-56-6)		
Partition coefficient n-octanol/water (Log Pow)	3.6		
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).		
heptan-2-one (110-43-0)			
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).		

12.4. Mobility in soil

n-butyl acetate (123-86-4)	tyl acetate (123-86-4)		
Surface tension	0.0163 N/m (20 °C)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.268 – 1.844 (log Koc, SRC PCKOCWIN v2.0, QSAR)		
Ecology - soil	Low potential for adsorption in soil.		

acetone (67-64-1)	tone (67-64-1)	
Surface tension	0.0237 N/m	
Ecology - soil	No (test)data on mobility of the substance available.	

heptan-2-one (110-43-0)	ı-2-one (110-43-0)		
Surface tension	0.0591 N/m (21.6 °C, EU Method A.5: Surface tension)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.45 (log Koc, EU Method C.19, Experimental value)		
Ecology - soil	Highly mobile in soil.		

12.5. Other adverse effects

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Additional information : Flammable vapors may accumulate in the container.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description (DOT) : UN1263 Paint, 3, II

UN-No.(DOT) : UN1263 Proper Shipping Name (DOT) : Paint

Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Packing group (DOT) : II - Medium Danger Hazard labels (DOT) : 3 - Flammable liquid



DOT Packaging Non Bulk (49 CFR 173.xxx) : 173 DOT Packaging Bulk (49 CFR 173.xxx) : 242

07/01/2021 EN (English US) SDS ID: S2084V2-US-SDS 9/13

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

DOT Special Provisions (49 CFR 172.102)

: 149 - When transported as a limited quantity or a consumer commodity, the maximum net capacity specified in 173.150(b)(2) of this subchapter for inner packaging may be increased to 5 L (1.3 gallons).

367 - For the purposes of documentation and package marking: a. The proper shipping name "Paint related material" may be used for consignments of packages containing "Paint" and "Paint related material" in the same package; b. The proper shipping name "Paint related material, corrosive, flammable" may be used for consignments of packages containing "Paint, corrosive, flammable" and "Paint related material, corrosive, flammable" in the same package; c. The proper shipping name "Paint related material, flammable, corrosive" may be used for consignments of packages containing "Paint, flammable, corrosive" and "Paint related material, flammable, corrosive" in the same package; and d. The proper shipping name "Printing ink related material" may be used for consignments of packages containing "Printing ink" and "Printing ink related material" in the same package.

383 - Packages containing toy plastic or paper caps for toy pistols described as "UN0349, Articles, explosive, n.o.s. (Toy caps), 1.4S" or "NA0337, Toy caps, 1.4S" are not subject to the subpart E (labeling) requirements of this part when offered for transportation by motor vehicle, rail freight, cargo vessel, and cargo aircraft and, notwithstanding the packing method assigned in §173.62 of this subchapter, in conformance with the following conditions:

B52 - Notwithstanding the provisions of 173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks.

B131 - When transported by highway, rail, or cargo vessel, waste Paint and Paint related material (UN1263; PG II and PG III), when in plastic or metal inner packagings of not more than 26.5 L (7 gallons), are excepted from the marking requirements in §172.301(a) and (c) and the labeling requirements in §172.400(a), when further packed in the following specification and non-specification bulk outer packagings and under the following conditions:

- a. Primary receptacles must conform to the general packaging requirements of subpart B of part 173 of this subchapter and may not leak. If they do leak, they must be overpacked in packagings conforming to the specification requirements of part 178 of this subchapter or in salvage packagings conforming to the requirements in §173.12 of this subchapter.
- b. Primary receptacles must be further packed in non-specification bulk outer packagings such as cubic yard boxes, plastic rigid-wall bulk containers, dump trailers, and roll-off containers. Bulk outer packagings must be liquid tight through design or by the use of lining materials.
- c. Primary receptacles may also be further packed in specification bulk outer packagings. Authorized specification bulk outer packagings are UN11G fiberboard intermediate bulk containers (IBC) and UN13H4 woven plastic, coated and with liner flexible intermediate bulk containers (FIBCs) meeting the Packing Group II performance level and lined with a plastic liner of at least 6 mil thickness.
- d. All inner packagings placed inside bulk outer packagings must be blocked and braced to prevent movement during transportation that could cause the container to open or fall over. Specification IBCs and FIBCs are to be secured to a pallet.

IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized. T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP8 - A portable tank having a minimum test pressure of 1.5 bar (150 kPa) may be used when the flash point of the hazardous material transported is greater than 0 C (32 F).

TP28 - A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

DOT Packaging Exceptions (49 CFR 173.xxx)

DOT Quantity Limitations Passenger aircraft/rail : 5 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 60 L

CFR 175.75)

DOT Vessel Stowage Location

: B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

Emergency Response Guide (ERG) Number

Other information

: No supplementary information available.

07/01/2021 EN (English US) SDS ID: S2084V2-US-SDS 10/13

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Transportation of Dangerous Goods

Transport document description (TDG) : UN1263 PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and

liquid lacquer base) with not more than 20 per cent nitrocellulose by mass if the nitrogen

content of the nitrocellulose is not more than 12.6 per cent by mass), 3, II

UN-No. (TDG) : UN1263 : PAINT Proper Shipping Name (TDG)

TDG Primary Hazard Classes : 3 - Class 3 - Flammable Liquids

Packing group (TDG) : II - Medium Danger

TDG Special Provisions : 59 - Substances that are listed by name in Schedule 1 must not be transported under this

shipping name. Substances transported under this shipping name may contain not more than 20% nitrocellulose if the nitrocellulose contains not more than 12.6% nitrogen (by dry mass),142 - The following shipping names may be used to meet the requirements of Part 3 (Documentation) and Part 4 (Dangerous Goods Safety Marks) when these dangerous goods

are offered for transport in the same means of containment:

(a) "PAINT RELATED MATERIAL" may be used for a means of containment containing both

paint and paint related material;

(b) "PAINT RELATED MATERIAL. CORROSIVE. FLAMMABLE" may be used for a means of containment containing both paint, corrosive, flammable, and paint related material, corrosive,

(c) "PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE" may be used for a means of containment containing both paint, flammable, corrosive, and paint related material, flammable,

corrosive; and

(d) "PRINTING INK RELATED MATERIAL" may be used for a means of containment

containing both printing ink and printing ink related material.

Explosive Limit and Limited Quantity Index Passenger Carrying Road Vehicle or Passenger : 5 L

Carrying Railway Vehicle Index

: 5 L

Transport by sea

Transport document description (IMDG) : UN 1263 PAINT, 3, II

UN-No. (IMDG) : 1263 Proper Shipping Name (IMDG) : PAINT

Class (IMDG) : 3 - Flammable liquids

Packing group (IMDG) : II - substances presenting medium danger

Limited quantities (IMDG) : 5 L

Air transport

Transport document description (IATA) : UN 1263 Paint, 3, II

UN-No. (IATA) : 1263 Proper Shipping Name (IATA) : Paint

: 3 - Flammable Liquids Class (IATA) Packing group (IATA) : II - Medium Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

n-butyl acetate (123-86-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Not subject to reporting requirements of the United States SARA Section 313	
CERCLA RQ	5000 lb

2-hydroxyethyl methacrylate (868-77-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

SDS ID: S2084V2-US-SDS 07/01/2021 EN (English US) 11/13

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

reaction mass of α -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl- ω -hydroxypoly(oxyethylene) and α -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl- ω -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag

FRI - FRI - indicates a polymeric substance containing no free-radical initiator in its Inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

PMN - PMN - indicates a commenced PMN substance.

XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).

reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate (1065336-91-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

acetone (67-64-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Not subject to reporting requirements of the United States SARA Section 313

CERCLA RQ 5000 lb

4-chlorobenzotrifluoride (98-56-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

heptan-2-one (110-43-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

n-butyl acetate (123-86-4)

Listed on the Canadian DSL (Domestic Substances List)

2-hydroxyethyl methacrylate (868-77-9)

Listed on the Canadian DSL (Domestic Substances List)

reaction mass of α -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl- ω -hydroxypoly(oxyethylene) and α -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl- ω -3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)

Listed on the Canadian DSL (Domestic Substances List)

reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate (1065336-91-5)

Listed on the Canadian DSL (Domestic Substances List)

acetone (67-64-1)

Listed on the Canadian DSL (Domestic Substances List)

4-chlorobenzotrifluoride (98-56-6)

Listed on the Canadian DSL (Domestic Substances List)

heptan-2-one (110-43-0)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

4-chlorobenzotrifluoride (98-56-6)

Listed on IARC (International Agency for Research on Cancer)

15.3. US State regulations

07/01/2021 EN (English US) SDS ID: S2084V2-US-SDS 12/13

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

4-chlorobenzotr	-chlorobenzotrifluoride (98-56-6)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No		

Component	State or local regulations
n-butyl acetate(123-86-4)	U.S Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations; U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S New York City - Right to Know Hazardous Substances List; U.S Pennsylvania - RTK (Right to Know) List
heptan-2-one(110-43-0)	U.S Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations; U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S New York City - Right to Know Hazardous Substances List; U.S Pennsylvania - RTK (Right to Know) List
acetone(67-64-1)	U.S Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations; U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S New York City - Right to Know Hazardous Substances List; U.S Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 10/03/2019

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause

temporary incapacitation or residual injury.

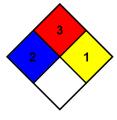
NFPA fire hazard : 3 - Liquids and solids (including finely divided suspended

solids) that can be ignited under almost all ambient

temperature conditions.

NFPA reactivity : 1 - Materials that in themselves are normally stable but can

become unstable at elevated temperatures and pressures.



SDS US GHS (GHS HazCom2012)

For professional use only.

The information contained within this Safety Data Sheet (SDS) is believed to be correct as of the date issued however it is subject to change from time to time. It does not purport to be all inclusive or exhaustive and shall only be used as a guide. U-POL makes no warranties, expressed or implied, including but not limited to, any implied warranty of fitness for a given purpose or usage. It is the Buyers responsibility to ensure the suitability of the products for their own use and to check the information is up to date. U-POL cannot be held responsible for the suitability of use for any of its products, considering the wide range of factors such as application, substrates and handling methods. Since these conditions of use are outside of our control, the company shall not be held liable for any damage resulting from handling or from contact with the product detailed. Moreover, addition of reducers, hardeners or other additives over and above U-POL's recommendations for use, may substantially alter the composition and hazards of the product. U-POL data sheets are available via the U-POL website at WWW.U-POL.COM.

SDS ID: S2084V2-US-SDS 07/01/2021 EN (English US) 13/13