

81-510150 Red 221 ISO

Safety Data Sheet

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

Revision date: 03/05/2021

Version: 16.4



SECTION 1: Identification

1.1. Identification

Product name : 81-510150 Red 221 ISO
Product form : Mixture
Product code : US1040614XX

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Product for industrial use only
Prohibited for use : Applications involving permanent implantation into the body
European class III medical devices
FDA Class III medical devices
Health Canada class IV Medical Devices
Life-sustaining medical applications

1.3. Supplier

LyondellBasell Advanced Polymers, Inc.

LyondellBasell Tower, Suite 300

1221 McKinney St.

P.O. Box 2583

Houston, TX 77252-2583

Customer service phone: 1-800-54-RESIN

Regulatory information: ASI-Amer.Regulatory.Requests@lyondellbasell.com

1.4. Emergency telephone number

Emergency number : For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300 CCN13495
Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US and GHS-Canada classification

Flammable liquids, Category 3	Flammable liquid and vapour.
Skin corrosion/irritation, Category 2	Causes skin irritation.
Serious eye damage/eye irritation, Category 2	Causes serious eye irritation.
Sensitisation — Skin, category 1	May cause an allergic skin reaction.
Reproductive toxicity, Category 1B	May damage fertility or the unborn child.
Reproductive toxicity, Additional category, Effects on or via lactation	May cause harm to breast-fed children.
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	May cause respiratory irritation.
Specific target organ toxicity — Repeated exposure, Category 1	Causes damage to organs through prolonged or repeated exposure.

2.2. GHS Label elements, including precautionary statements

GHS-US and GHS-Canada labelling

Hazard pictograms (GHS-US and GHS-Canada) :



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Signal word (GHS-US and GHS-Canada)	: Danger
Hazard statements (GHS-US and GHS-Canada)	: Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause respiratory irritation. May damage fertility or the unborn child. May cause harm to breast-fed children. Causes damage to organs through prolonged or repeated exposure.
Precautionary statements (GHS-US and GHS-Canada)	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. heat, sparks, open flames, hot surfaces Keep cool. Do not breathe dust, fume, gas, mist, spray, vapours. Wash face, hands, hands, forearms and face thoroughly after handling Avoid release to the environment. Wear eye protection, face protection, protective gloves. Immediately call a doctor, a POISON CENTER. In case of fire: Use ABC-powder, carbon dioxide (CO ₂), dry extinguishing powder, dry sand, foam to extinguish. Store in a well-ventilated place. Keep container tightly closed. Dispose of contents/container to an approved waste disposal plant.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS-US and GHS-Canada)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Styrene	CAS No.: 100-42-5	30 – 60
2-Methyl-2-propenoic acid, methyl ester	CAS No.: 80-62-6	1 – 5
Methanol	CAS No.: 67-56-1	0,1 – 1
Hexanoic acid, 2-ethyl-, potassium salt (1:1)	CAS No.: 3164-85-0	0,1 – 1
Cobalt 2-Ethylhexanoate	CAS No.: 136-52-7	0,1 – 1

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

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	: Move the affected person away from the contaminated area. Immediately consult a doctor/medical service. If possible, show him this sheet. Failing this, show him the packaging or label. Do not leave affected person unattended.
First-aid measures after inhalation	: Call a physician immediately. If unconscious place in recovery position and seek medical advice.

- First-aid measures after skin contact : After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Rinse immediately with plenty of water for 15 minutes. If symptoms persist, call a physician.
- First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). If eye irritation persists, consult a specialist.
- First-aid measures after ingestion : In all cases of doubt, or when symptoms persist, seek medical advice. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Do not give milk.

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

- Symptoms/effects after inhalation : May cause respiratory irritation.
- Symptoms/effects after skin contact : Skin irritation, dermatitis and sensitisation. May cause sensitisation of susceptible persons by skin contact.
- Symptoms/effects after eye contact : Causes serious eye irritation.
- Symptoms/effects after ingestion : May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

4.3. Immediate medical attention and special treatment, if necessary

If you feel unwell, seek medical advice.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Alcohol resistant foam, dry chemical powder, Carbon dioxide.
- Unsuitable extinguishing media : high volume water jet.

5.2. Specific hazards arising from the chemical

- Fire hazard : Do not allow run-off from fire fighting to enter drains or water courses.

5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : Comply with local regulations for disposal.
- Protection during firefighting : In case of fire: Wear self-contained breathing apparatus.
- Other information : Use water spray/stream to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Protective equipment : Wear suitable protective clothing.
- Emergency procedures : Remove all sources of ignition. Ensure adequate ventilation. Evacuate personnel to a safe area. Special attention should be given to low areas/pits where flammable vapours can accumulate.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- For containment : Collect the residue by means of a non-combustible absorbent material. Collect all waste in suitable and labelled containers and dispose according to local legislation.
- Methods for cleaning up : Collect spillage. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Store in a well-ventilated place. Keep container tightly closed.

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6.4. Reference to other sections

See Heading 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed

: Use isolated drainage to prevent discharge to soil. Take precautionary measures against static discharge. The product may charge electrostatically: use earthing leads when transferring from one container to another. In order to rule out potential electrostatic discharge production, the system must be adequately grounded.

Precautions for safe handling

: Do not exceed the occupational exposure limits (OEL). Avoid contact with skin and eyes. Provide sufficient air exchange and/or exhaust. Provide good ventilation in process area to prevent formation of vapour.

Hygiene measures

: Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

: Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. Containers which are opened should be properly resealed and kept upright to prevent leakage.

Storage temperature

: < 25 °C

Heat and ignition sources

: This material can be ignited by heat, sparks, flames, or other sources of ignition (e.g. static electricity, pilot lights, mechanical/electrical equipment, and electronic devices such as cell phones, computers, calculators, and pagers which have not been. Explosion-free electrical equipment and lighting with earth. Electrical equipment should be protected to the appropriate standard.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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No additional information available

Styrene (100-42-5)

USA - ACGIH - Occupational Exposure Limits

ACGIH OEL TWA	85 mg/m³
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ACGIH OEL TWA [ppm]	20 ppm
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ACGIH OEL STEL	170 mg/m³
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ACGIH OEL STEL [ppm]	40 ppm
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Remark (ACGIH)	CNS impair; URT irr; peripheral
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ACGIH chemical category	Not Classifiable as a Human Carcinogen
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USA - ACGIH - Biological Exposure Indices

BEI	400 mg/g creatinine (Medium: urine - Time: end of shift - Parameter: Mandelic acid plus phenylglyoxylic acid (nonspecific) 40 µg/l (Medium: urine - Time: end of shift - Parameter: Styrene)
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USA - OSHA - Occupational Exposure Limits

OSHA PEL TWA [1]	420 mg/m³
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OSHA PEL TWA [2]	100 ppm
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OSHA PEL C [ppm]	200 ppm
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Styrene (100-42-5)	
Remark (OSHA)	(Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift: 600 ppm 5 mins. in any 3 hrs.)
USA - IDLH - Occupational Exposure Limits	
IDLH [ppm]	700 ppm
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	215 mg/m ³
NIOSH REL TWA [ppm]	50 ppm
NIOSH REL STEL	425 mg/m ³
NIOSH REL STEL [ppm]	100 ppm
Methanol (67-56-1)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA [ppm]	200 ppm
ACGIH OEL STEL [ppm]	250 ppm
ACGIH chemical category	Skin - potential significant contribution to overall exposure by the cutaneous route
USA - ACGIH - Biological Exposure Indices	
BEI	15 mg/l (Medium: urine - Time: end of shift - Parameter: Methanol (background, nonspecific))
USA - OSHA - Occupational Exposure Limits	
OSHA PEL TWA [1]	260 mg/m ³
OSHA PEL TWA [2]	200 ppm
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	260 mg/m ³
NIOSH REL TWA [ppm]	200 ppm
NIOSH REL STEL	325 mg/m ³
NIOSH REL STEL [ppm]	250 ppm
US-NIOSH chemical category	Potential for dermal absorption
2-Methyl-2-propenoic acid, methyl ester (80-62-6)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	205 mg/m ³
ACGIH OEL TWA [ppm]	50 ppm
ACGIH OEL STEL	410 mg/m ³
ACGIH OEL STEL [ppm]	100 ppm
Remark (ACGIH)	URT & eye irr; body weight eff; DSEN; RSEN; A4 (Not classifiable as a Human Carcinogen: Agents which cause concern that they could be carcinogenic for humans but which cannot be assessed conclusively because of a lack of data. In vitro or animal studies do not provide indications of carcinogenicity which are sufficient to classify the agent into one of the other categories)

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2-Methyl-2-propenoic acid, methyl ester (80-62-6)

ACGIH chemical category dermal sensitizer, Not Classifiable as a Human Carcinogen

USA - OSHA - Occupational Exposure Limits

OSHA PEL TWA [1] 410 mg/m³

OSHA PEL TWA [2] 100 ppm

USA - IDLH - Occupational Exposure Limits

IDLH [ppm] 1000 ppm

USA - NIOSH - Occupational Exposure Limits

NIOSH REL TWA 410 mg/m³

NIOSH REL TWA [ppm] 100 ppm

Hexanoic acid, 2-ethyl-, potassium salt (1:1) (3164-85-0)

No additional information available

Cobalt 2-Ethylhexanoate (136-52-7)

No additional information available

8.2. Appropriate engineering controls

Environmental exposure controls : Do not empty into drains.

8.3. Individual protection measures/Personal protective equipment

Materials for protective clothing:

Chemical resistant safety shoes. Overall.

Hand protection:

Wear suitable gloves. PVC gloves. A waterproof cream can protect exposed skin parts. Do not use if contact has already taken place. In case of reutilization, clean gloves before taking off and store in well-aired place. Before removing gloves clean them with soap and water. Protective gloves have to be replaced at the first sign of deterioration.

Eye protection:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Safety glasses with side shields. Do not wear contact lenses

Skin and body protection:

Wear anti-static footwear and clothing. Tight protective clothing required. Only wear fitting, comfortable and clean protective clothing. Wash clothing before re-using. Avoid contact with skin. May cause sensitisation of susceptible persons by skin contact

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. If excessive exposure exists, use only approved air-purifying or supplied air respirator operated in a positive pressure mode. Consult supplier for specific recommendations

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Colour : RED - red

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Odour	: Pungent
Odour threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 100 °C
Flash point	: 28,33 °C
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: 4,5
Relative density	: No data available
Solubility	: Water: Negligible
Partition coefficient n-octanol/water (Log Pow)	: No data available
Self ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: > 20,5 mm²/s
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

Vapours may form explosive mixture with air.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Strong acids. Strong bases. Oxidizing agents. Peroxides.

10.6. Hazardous decomposition products

Stable under normal conditions.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Styrene (100-42-5)	
LD50 oral rat	5000 mg/kg
LD50 dermal rat	> 2000 mg/kg
ATE US (oral)	5000 mg/kg bodyweight

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Styrene (100-42-5)

ATE US (gases)	4500 ppmv/4h
ATE US (vapours)	11,8 mg/l/4h
ATE US (dust,mist)	1,5 mg/l/4h

Methanol (67-56-1)

LD50 oral rat	2528 mg/kg
LD50 dermal rabbit	17100 mg/kg
LC50 Inhalation - Rat	128,2 mg/l
ATE US (oral)	100 mg/kg body weight
ATE US (dermal)	300 mg/kg body weight
ATE US (gases)	700 ppmv/4h
ATE US (vapours)	3 mg/l/4h
ATE US (dust,mist)	0,5 mg/l/4h

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

Styrene (100-42-5)

IARC group	2B - Possibly carcinogenic to humans
National Toxicology Program (NTP) Status	Reasonably anticipated to be Human Carcinogen
In OSHA Hazard Communication Carcinogen list	Yes

2-Methyl-2-propenoic acid, methyl ester (80-62-6)

IARC group	3 - Not classifiable
Reproductive toxicity	: May damage fertility or the unborn child. May cause harm to breast-fed children.
STOT-single exposure	: May cause respiratory irritation.
STOT-repeated exposure	: Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified
Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: Skin irritation, dermatitis and sensitisation. May cause sensitisation of susceptible persons by skin contact.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

SECTION 12: Ecological information

12.1. Toxicity

Styrene (100-42-5)

LC50 - Fish [1]	4,02 mg/l <i>Pimephales promelas</i> (fathead minnow)
EC50 - Crustacea [1]	4,7 mg/l <i>Daphnia magna</i> .
NOEC chronic crustacea	1,01 mg/l <i>Daphnia magna</i> (Water flea)

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Methanol (67-56-1)

LC50 - Fish [1]	15400 mg/l <i>Lepomis macrochirus</i>
EC50 - Crustacea [1]	> 10000 mg/l <i>Daphnia magna</i> .
ErC50 algae	22000 mg/l <i>Selenastrum capricornutum</i> (green algae)
NOEC chronic fish	7900 mg/l <i>Oryzias latipes</i>

12.2. Persistence and degradability

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Persistence and degradability	No data available.
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12.3. Bioaccumulative potential

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Bioaccumulative potential	No data available.
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Styrene (100-42-5)

Partition coefficient n-octanol/water (Log Pow)	3
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12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other adverse effects : No data available.

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional legislation (waste)	: Disposal must be done according to official regulations. Hazardous waste. Solvent.
Sewage disposal recommendations	: Do not allow to enter into surface water or drains.
Waste disposal recommendations	: Dispose of this material and its container to hazardous or special waste collection point. Handle contaminated packaging in the same way as the product itself.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description (DOT)	: UN1866 Resin solution (flammable), 3, III
UN-No. (DOT)	: UN1866
Proper Shipping Name (DOT)	: Resin solution flammable
Class (DOT)	: 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Packing group (DOT)	: III - Minor Danger
Hazard labels (DOT)	: 3 - Flammable liquid



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

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DOT Packaging Bulk (49 CFR 173.xxx)	: 242
DOT Special Provisions (49 CFR 172.102)	: B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable. B52 - Notwithstanding the provisions of 173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks. IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). 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, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). T2 - 1.5 178.274(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 = $97 / (1 + a (t_r - t_f))$ Where: t_r is the maximum mean bulk temperature during transport, and t_f is the temperature in degrees celsius of the liquid during filling.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 150
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 220 L
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

Transportation of Dangerous Goods

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory with status Active

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.			
Styrene	CAS No 100-42-5	SARA Section 313 - Emission Reporting 0,1%	30 - 60%
ethylbenzene	CAS No 100-41-4	SARA Section 313 - Emission Reporting 0,1%	0,1 - 1%
2-Methyl-2-propenoic acid, methyl ester	CAS No 80-62-6	SARA Section 313 - Emission Reporting 1,0%	1 - 5%

15.2. US State regulations



WARNING:

This product can expose you to Benzene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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Component	Carcinogenicity	Developmental toxicity	Reproductive toxicity male	Reproductive toxicity female	No significant risk level (NSRL)
Titanium Dioxide(13463-67-7)	X				
Styrene(100-42-5)	X				27 µg/day
ethylbenzene(100-41-4)	X				54 µg/day (inhalation)
Benzene(71-43-2)	X	X	X		6,4 µg/day (oral)
Toluene(108-88-3)		X		X	
Ethylene glycol(107-21-1)		X			
Acetaldehyde(75-07-0)	X				90 µg/day (inhalation)
1,4-Dioxane(123-91-1)	X				30 µg/day
Quartz (SiO2): 1-10% fine fraction(14808-60-7)	X				
Methanol(67-56-1)		X			
Naphthalene(91-20-3)	X				5,8 µg/day
Cumene(98-82-8)	X				

Styrene (100-42-5)

U.S. - California - SCAQMD - Toxic Air Contaminants - Non-Cancer Acute
 U.S. - California - SCAQMD - Toxic Air Contaminants - Non-Cancer Chronic
 U.S. - California - Toxic Air Contaminant List (AB 1807, AB 2728)
 U.S. - Illinois - Toxic Air Contaminant Carcinogens
 U.S. - Illinois - Toxic Air Contaminants
 U.S. - Massachusetts - Allowable Ambient Limits (AALs)
 U.S. - Massachusetts - Allowable Threshold Concentrations (ATCs)
 U.S. - Massachusetts - Drinking Water - Maximum Contaminant Levels (MCLs)
 U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 1
 U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 2
 U.S. - Massachusetts - Oil & Hazardous Material List - Reportable Quantity
 U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 1
 U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 2
 U.S. - Massachusetts - Right To Know List
 U.S. - Massachusetts - Threshold Effects Exposure Limits (TEELs)
 U.S. - Massachusetts - Toxics Use Reduction Act
 U.S. - New Jersey - Discharge Prevention - List of Hazardous Substances
 U.S. - New Jersey - Environmental Hazardous Substances List
 U.S. - New Jersey - Primary Drinking Water Standards - Maximum Contaminant Levels - MCLs
 U.S. - New Jersey - Right to Know Hazardous Substance List
 U.S. - New Jersey - Special Health Hazards Substances List
 U.S. - New Jersey - Water Quality - Ground Water Quality Criteria
 U.S. - New Jersey - Water Quality - Practical Quantitation Levels (PQLs)
 U.S. - California - Safer Consumer Products - Initial List of Candidate Chemicals and Chemical Groups
 U.S. - Pennsylvania - Drinking Water - Maximum Contaminant Levels (MCLs)
 U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
 U.S. - Pennsylvania - RTK (Right to Know) List

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Methanol (67-56-1)

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)
U.S. - California - SCAQMD - Toxic Air Contaminants - Non-Cancer Acute
U.S. - California - SCAQMD - Toxic Air Contaminants - Non-Cancer Chronic
U.S. - California - Toxic Air Contaminant List (AB 1807, AB 2728)
U.S. - Illinois - Toxic Air Contaminants
U.S. - Massachusetts - Allowable Ambient Limits (AALs)
U.S. - Massachusetts - Allowable Threshold Concentrations (ATCs)
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 1
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 2
U.S. - Massachusetts - Oil & Hazardous Material List - Reportable Quantity
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 1
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 2
U.S. - Massachusetts - Right To Know List
U.S. - Massachusetts - Threshold Effects Exposure Limits (TELs)
U.S. - Massachusetts - Toxics Use Reduction Act
U.S. - New Jersey - Discharge Prevention - List of Hazardous Substances
U.S. - New Jersey - Environmental Hazardous Substances List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - New Jersey - Special Health Hazards Substances List
U.S. - New Jersey - Water Quality - Ground Water Quality Criteria
U.S. - New Jersey - Water Quality - Practical Quantitation Levels (PQLs)
U.S. - California - Safer Consumer Products - Initial List of Candidate Chemicals and Chemical Groups
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

2-Methyl-2-propenoic acid, methyl ester (80-62-6)

U.S. - California - Toxic Air Contaminant List (AB 1807, AB 2728)
U.S. - Illinois - Toxic Air Contaminants
U.S. - Massachusetts - Allowable Ambient Limits (AALs)
U.S. - Massachusetts - Allowable Threshold Concentrations (ATCs)
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 1
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 2
U.S. - Massachusetts - Oil & Hazardous Material List - Reportable Quantity
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 1
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 2
U.S. - Massachusetts - Right To Know List
U.S. - Massachusetts - Threshold Effects Exposure Limits (TELs)
U.S. - Massachusetts - Toxics Use Reduction Act
U.S. - New Jersey - Discharge Prevention - List of Hazardous Substances
U.S. - New Jersey - Environmental Hazardous Substances List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - New Jersey - Special Health Hazards Substances List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

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Abbreviations and acronyms

REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
SVHC	Substance of very high concern
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road

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Abbreviations and acronyms	
IMDG	International Maritime Dangerous Goods
IATA	International Air Transport Association
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
MARPOL 73/78	International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978. ("MARPOL" is short for marine pollution and 73/78 short for the years 1973 and 1978.)
IBC	The International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
OSHA	Occupational Safety & Health Administration
TWA	Time Weighted Average
STEL	Occupational Exposure Limits - Short Term Exposure Limits (STELs)
ACGIH	American Conference of Government Industrial Hygienists
TLV	Threshold Limit Value
IARC	International Agency for Research on Cancer
ED	Endocrine disrupting properties

Indication of changes:			
Version	Indication of changes	Change	Comments
16.1	15.2 > California Prop 65 > 1,4-Dioxane > No significant risk level (NSRL)	Modified	
16.2	15.2 > California Prop 65 > Toluene > Component	Modified	
16.3	16 > Abbreviations and acronyms	Modified	
16.4	1.2 > Schulman Prohibited Uses	Added	
16.4	3.2 > Composition/information on ingredients > Styrene > Concentration	Modified	
16.4	3.2 > Composition/information on ingredients > 2-Methyl-2-propenoic acid, methyl ester > Concentration	Modified	
16.4	3.2 > Composition/information on ingredients > Methanol > Concentration	Modified	
16.4	3.2 > Composition/information on ingredients > Hexanoic acid, 2-ethyl-, potassium salt (1:1) > Concentration	Modified	
16.4	3.2 > Composition/information on ingredients > Cobalt 2-Ethylhexanoate > Concentration	Modified	
16.4	8.1 > Control parameters	Added	
16.4	11.1 > Reproductive toxicity	Added	
16.4	11.1 > Expected Symptoms/Effects, Acute and Delayed	Removed	

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16.4	11.1 > Symptoms/effects after eye contact	Added	
16.4	15.3 > DSL and NDSL	Removed	

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