

SAFETY DATA SHEET

TRINSEO EUROPE GMBH

Safety Data Sheet according to Reg. (EU) No 2015/830

Product name: PULSE™ GX70 UVB TP7702422 Engineering

Resin STA

Revision Date: 2022/06/01 Version: 1.0 Date of last issue: -Print Date: 2022/06/01

TRINSEO EUROPE GMBH encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name: PULSE™ GX70 UVB TP7702422 Engineering Resin STA

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

Identified uses: A thermoplastic resin. For industrial conversion as a raw material for manufacture of articles or goods.

1.3 Details of the supplier of the safety data sheet COMPANY IDENTIFICATION

TRINSEO EUROPE GMBH ZUGERSTRASSE 231 8810 HORGEN SWITZERLAND

Customer Information Number: +31 115 67 2601

SDSQuestion@trinseo.com

1.4 EMERGENCY TELEPHONE NUMBER

24-Hour Emergency Contact: +(1)-703-741-5970 Local Emergency Contact: +(47)-21930678 Norway Emergency Center: + 47 22 59 13 00

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008:

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008:

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.3 Other hazards

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 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

This product is a mixture.

CASRN / EC-No. / Index-No.	REACH Registration Number	Concentration	Component	Classification: REGULATION (EC) No 1272/2008
CASRN 103598-77-2 EC-No. Polymer Index-No.	_	<= 60,0 %	Polycarbonate	Not classified
CASRN 26657-42-1 EC-No. Polymer Index-No.	-	< 40,0 %	Butadiene-styrene- acrylonitrile-n-butyl acrylate polymer	Not classified
CASRN 9003-54-7 EC-No. Polymer Index-No.	_	< 15,0 %	2-Propenenitrile, polymer with ethenylbenzene	Not classified

If present in this product, any not classified components disclosed above for which no country specific OEL value(s) is(are) indicated under Section 8, are being disclosed as voluntarily disclosed components.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures General advice:

First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Page 2 of 14

Inhalation: Move person to fresh air and keep comfortable for breathing; consult a physician.

Skin contact: Wash off with plenty of water. Seek first aid or medical attention as needed. If molten material comes in contact with the skin, do not apply ice but cool under ice water or running stream of water. DO NOT attempt to remove the material from skin. Removal could result in severe tissue damage. Seek medical attention immediately. Suitable emergency safety shower facility should be immediately available.

Eye contact: Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

Ingestion: If swallowed, seek medical attention. May cause gastrointestinal blockage. Do not give laxatives. Do not induce vomiting unless directed to do so by medical personnel.

4.2 Most important symptoms and effects, both acute and delayed:

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician: If burn is present, treat as any thermal burn, after decontamination. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Water.. Dry chemical fire extinguishers.. Carbon dioxide fire extinguishers..

Unsuitable extinguishing media: None known...

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating... Combustion products may include and are not limited to:. Nitrogen oxides.. Carbon monoxide. Carbon dioxide. Combustion products may include trace amounts of:. Styrene.. Hydrogen cyanide.. Phenolic compounds.. Phosphorus oxides..

Unusual Fire and Explosion Hazards: Pneumatic conveying and other mechanical handling operations can generate combustible dust. To reduce the potential for dust explosions, do not permit dust to accumulate.. This product contains a flame retardant to inhibit accidental ignition from small fire sources.. Dense smoke is produced when product burns..

5.3 Advice for firefighters

Page 3 of 14

Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition.. Cool surroundings with water to localize fire zone.. Hand held dry chemical or carbon dioxide extinguishers may be used for small fires...

Special protective equipment for firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures: Spilled material may cause a slipping hazard. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.
- **6.2 Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.
- **6.3 Methods and materials for containment and cleaning up:** Contain spilled material if possible. Sweep up. Collect in suitable and properly labeled containers. See Section 13, Disposal Considerations, for additional information.
- **6.4 Reference to other sections:** References to other sections, if applicable, have been provided in the previous sub-sections.

SECTION 7: HANDLING AND STORAGE

- 7.1 Precautions for safe handling: No smoking, open flames or sources of ignition in handling and storage area. Good housekeeping and controlling of dusts are necessary for safe handling of product. Avoid breathing process fumes. When appropriate, unique handling information for containers can be found on the product label. Workers should be protected from the possibility of contact with molten resin. Do not get molten material in eyes, on skin or clothing. Pneumatic conveying and other mechanical handling operations can generate combustible dust. To reduce the potential for dust explosions, electrically bond and ground equipment and do not permit dust to accumulate. Dust can be ignited by static discharge.
- 7.2 Conditions for safe storage, including any incompatibilities: Store in accordance with good manufacturing practices.
- 7.3 Specific end use(s): See the technical data sheet on this product for further information.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

Although some of the additives used in this product may have exposure guidelines, these additives are encapsulated in the product and no exposure would be expected under normal handling conditions.

8.2 Exposure controls

Engineering controls: Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

Individual protection measures

Eve/face protection: Use safety glasses (with side shields). Safety glasses (with side shields) should be consistent with EN 166 or equivalent. If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles. Chemical goggles should be consistent with EN 166 or equivalent. If exposure causes eye discomfort, use a full-face respirator (meeting standard EN 136) with organic vapor cartridge (meeting standard EN 14387).

Skin protection

Hand protection: Chemical protective gloves should not be needed when handling this material. Consistent with general hygienic practice for any material, skin contact should be minimized. Use gloves to protect from mechanical injury. Selection of gloves will depend on the task. Use gloves with insulation for thermal protection (EN 407), when needed.

Other protection: No precautions other than clean body-covering clothing should be needed.

Respiratory protection: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. Use an approved air-purifying respirator when vapors are generated at increased temperatures or when dust or mist is present.

Use the following CE approved air-purifying respirator: When dust/mist are present use a/an Particulate filter, type P2 (meeting standard EN 143). When combinations of vapors, acids, or dusts/mists are present use a/an Organic vapor cartridge with a particulate pre-filter, type AP2 (meeting standard EN 14387).

Environmental exposure controls

See SECTION 7: Handling and storage and SECTION 13: Disposal considerations for measures to prevent excessive environmental exposure during use and waste disposal.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Physical state Granules. Color black Odor Odorless

Odor Threshold No test data available

pН Not applicable

Page 5 of 14

Product name: PULSE™ GX70 UVB TP7702422 Engineering Resin Revision Date: 2022/06/01

STA Version: 1.0

Melting point/range No test data available

Freezing point Not applicable
Boiling point (760 mmHg) Not applicable
Flash point Not applicable

Evaporation Rate (Butyl Acetate N

= 1)

No test data available

Flammability (solid, gas) Not expected to form explosive dust-air mixtures. Literature

Lower explosion limitNot applicableUpper explosion limitNot applicableVapor PressureNot applicableRelative Vapor Density (air = 1)Not applicable

Relative Density (water = 1) 1,10 - 1,14 Literature
Water solubility No data available
Partition coefficient: n- No data available

octanol/water

Auto-ignition temperatureNo test data availableDecomposition temperatureNo test data available

Kinematic Viscosity Not applicable

Explosive propertiesNo test data available **Oxidizing properties**No test data available

9.2 Other information

Molecular weight No test data available

NOTE: The physical data presented above are typical values and should not be construed as a specification.

SECTION 10: STABILITY AND REACTIVITY

- 10.1 Reactivity: No dangerous reaction known under conditions of normal use.
- **10.2 Chemical stability:** Stable.
- 10.3 Possibility of hazardous reactions: Polymerization will not occur.
- 10.4 Conditions to avoid: Avoid temperatures above 340 °C

Exposure to elevated temperatures can cause product to decompose.

10.5 Incompatible materials: None known.

10.6 Hazardous decomposition products: Decomposition products depend upon temperature, air supply and the presence of other materials.. Processing may release fumes and other decomposition products. At temperatures exceeding melt temperatures, polymer fragments can be released. Fumes can be irritating.. Decomposition products can include and are not limited to:. Carbon monoxide. Carbon dioxide. Aromatic compounds.. Hydrocarbons.. Phenolics.. Polymer fragments..

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicological information appears in this section when such data is available.

11.1 Information on toxicological effects

Acute toxicity (represents short term exposures with immediate effects - no chronic/delayed effects known unless otherwise noted)

Acute oral toxicity

Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. May cause choking if swallowed.

Single dose oral LD50 has not been determined.

Typical for this family of materials. LD50, Rat, > 5 000 mg/kg Estimated.

Information for components:

Polycarbonate

LD50, Rat, > 5 000 mg/kg

Butadiene-styrene-acrylonitrile-n-butyl acrylate polymer

Single dose oral LD50 has not been determined.

Typical for this family of materials. LD50, Rat, > 5 000 mg/kg Estimated.

2-Propenenitrile, polymer with ethenylbenzene

LD50, Rat, > 5 000 mg/kg Estimated.

Acute dermal toxicity

No adverse effects anticipated by skin absorption.

The dermal LD50 has not been determined.

Typical for this family of materials. LD50, Rabbit, > 2 000 mg/kg Estimated.

Information for components:

Polycarbonate

LD50, Rabbit, > 2 000 mg/kg No deaths occurred at this concentration.

Butadiene-styrene-acrylonitrile-n-butyl acrylate polymer

Page 7 of 14

STA Version: 1.0

Revision Date: 2022/06/01

The dermal LD50 has not been determined.

Typical for this family of materials. LD50, Rabbit, > 2 000 mg/kg Estimated.

2-Propenenitrile, polymer with ethenylbenzene

For similar material(s): LD50, Rabbit, > 2 000 mg/kg Estimated.

Acute inhalation toxicity

No adverse effects are anticipated from single exposure to dust. Vapors released during thermal processing may cause respiratory irritation.

The LC50 has not been determined.,

Information for components:

Polycarbonate

The LC50 has not been determined.

Butadiene-styrene-acrylonitrile-n-butyl acrylate polymer

The LC50 has not been determined.,

2-Propenenitrile, polymer with ethenylbenzene

The LC50 has not been determined.

Skin corrosion/irritation

Prolonged contact is essentially nonirritating to skin.

Mechanical injury only.

Under normal processing conditions, material is heated to elevated temperatures; contact with the material may cause thermal burns.

Information for components:

Butadiene-styrene-acrylonitrile-n-butyl acrylate polymer

Prolonged contact is essentially nonirritating to skin.

Mechanical injury only.

Under normal processing conditions, material is heated to elevated temperatures; contact with the material may cause thermal burns.

2-Propenenitrile, polymer with ethenylbenzene

Prolonged contact is essentially nonirritating to skin.

Under normal processing conditions, material is heated to elevated temperatures; contact with the material may cause thermal burns.

Serious eye damage/eye irritation

Solid or dust may cause irritation or corneal injury due to mechanical action.

Elevated temperatures may generate vapor levels sufficient to cause eye irritation. Effects may include discomfort and redness.

Information for components:

Butadiene-styrene-acrylonitrile-n-butyl acrylate polymer

Solid or dust may cause irritation or corneal injury due to mechanical action.

Page 8 of 14

STA Version: 1.0

Revision Date: 2022/06/01

Elevated temperatures may generate vapor levels sufficient to cause eye irritation. Effects may include discomfort and redness.

2-Propenenitrile, polymer with ethenylbenzene

Solid or dust may cause irritation or corneal injury due to mechanical action.

Sensitization

For skin sensitization: No relevant data found.

For respiratory sensitization: No relevant data found.

Information for components:

Butadiene-styrene-acrylonitrile-n-butyl acrylate polymer

For skin sensitization: No relevant data found.

For respiratory sensitization: No relevant data found.

2-Propenenitrile, polymer with ethenylbenzene

Did not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization: No relevant data found.

Specific Target Organ Systemic Toxicity (Single Exposure)

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Information for components:

Butadiene-styrene-acrylonitrile-n-butyl acrylate polymer

The substance or mixture is not classified as specific target organ toxicant, single exposure.

2-Propenenitrile, polymer with ethenylbenzene

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Aspiration Hazard

Based on physical properties, not likely to be an aspiration hazard.

Information for components:

Butadiene-styrene-acrylonitrile-n-butyl acrylate polymer

Based on physical properties, not likely to be an aspiration hazard.

2-Propenenitrile, polymer with ethenylbenzene

Based on physical properties, not likely to be an aspiration hazard.

Chronic toxicity (represents longer term exposures with repeated dose resulting in chronic/delayed effects - no immediate effects known unless otherwise noted)

Page 9 of 14

Specific Target Organ Systemic Toxicity (Repeated Exposure)

Additives are encapsulated in the product and are not expected to be released under normal processing conditions or foreseeable emergency.

Information for components:

Butadiene-styrene-acrylonitrile-n-butyl acrylate polymer

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

2-Propenenitrile, polymer with ethenylbenzene

No relevant data found.

Carcinogenicity

No relevant data found.

Information for components:

Butadiene-styrene-acrylonitrile-n-butyl acrylate polymer

No relevant data found.

2-Propenenitrile, polymer with ethenylbenzene

No relevant data found.

Teratogenicity

No relevant data found.

Information for components:

Butadiene-styrene-acrylonitrile-n-butyl acrylate polymer

No relevant data found.

2-Propenenitrile, polymer with ethenylbenzene

No relevant data found.

Reproductive toxicity

No relevant data found.

Information for components:

Butadiene-styrene-acrylonitrile-n-butyl acrylate polymer

No relevant data found.

2-Propenenitrile, polymer with ethenylbenzene

No relevant data found.

Mutagenicity

No relevant data found.

Information for components:

Page 10 of 14

Butadiene-styrene-acrylonitrile-n-butyl acrylate polymer

No relevant data found.

2-Propenenitrile, polymer with ethenylbenzene

No relevant data found.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicological information appears in this section when such data is available.

12.1 Toxicity

Acute toxicity to fish

Not expected to be acutely toxic, but material in pellet or bead form may mechanically cause adverse effects if ingested by waterfowl or aquatic life.

12.2 Persistence and degradability

Biodegradability: This water-insoluble polymeric solid is expected to be inert in the environment. Surface photodegradation is expected with exposure to sunlight. No appreciable biodegradation is expected.

12.3 Bioaccumulative potential

Bioaccumulation: No bioconcentration is expected because of the relatively high molecular weight (MW greater than 1000).

12.4 Mobility in soil

In the terrestrial environment, material is expected to remain in the soil. In the aquatic environment, material will sink and remain in the sediment.

12.5 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.

12.6 Other adverse effects

No relevant data found.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

For uncontaminated material the disposal options include mechanical and chemical recycling or energy recovery. In some countries landfill is also allowed. For contaminated material the options remain the same, although additional evaluation is required. For all countries the disposal methods must be in compliance with national and provincial laws and any municipal or local by-laws. All disposal methods must be in compliance with the EU framework Directives 2008/98/EC and their subsequent adaptations, as implemented in National Laws and Regulations, as well as EU Directives dealing with priority waste streams. Transboundary shipment of wastes must be in compliance with Regulation (EC) No 1013/2006 and subsequent modifications.

Page 11 of 14

Product name: PULSE™ GX70 UVB TP7702422 Engineering Resin Revision Date: 2022/06/01

STA Version: 1.0

The definitive assignment of this material to the appropriate EWC group and thus its proper EWC code will depend on the use that is made of this material. Contact the authorized waste disposal services.

SECTION 14: TRANSPORT INFORMATION

Classification for ROAD and Rail transport (ADR/RID):

14.1 UN number Not applicable

14.2 UN proper shipping name Not regulated for transport

14.3 Transport hazard class(es) Not applicable14.4 Packing group Not applicable

14.5 Environmental hazards Not considered environmentally hazardous based on

available data.

14.6 Special precautions for user No data available.

Classification for SEA transport (IMO-IMDG):

14.1 UN number Not applicable

14.2 UN proper shipping name Not regulated for transport

14.3 Transport hazard class(es) Not applicable14.4 Packing group Not applicable

14.5 Environmental hazards Not considered as marine pollutant based on available data.

14.6 Special precautions for user No data available.

14.7 Transport in bulk according

to Annex I or II of MARPOL 73/78 and the IBC or IGC

Consult IMO regulations before transporting ocean bulk

Code

Classification for AIR transport (IATA/ICAO):

14.1 UN number Not applicable

14.2 UN proper shipping name Not regulated for transport

14.3 Transport hazard class(es) Not applicable
 14.4 Packing group Not applicable
 14.5 Environmental hazards Not applicable
 14.6 Special precautions for user No data available.

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

Page 12 of 14

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACh Regulation (EC) No 1907/2006

This product contains only components that have been either registered, are exempt from registration, are regarded as registered or are not subject to registration according to Regulation (EC) No. 1907/2006 (REACH)., Polymers are exempted from registration under REACH. All relevant starting materials and additives have been either registered, or are exempt from registration according to Regulation (EC) No. 1907/2006 (REACH)., The aforementioned indications of the REACH registration status are provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. It is the buyer's vuser's responsibility to ensure that his/her understanding of the regulatory status of this product is correct.

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Listed in Regulation: Not applicable

Further information

Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable.

15.2 Chemical safety assessment

Not applicable

SECTION 16: OTHER INFORMATION

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) No 1272/2008

This product is not classified as dangerous according to EC criteria.

Identification Number: 97005614 / A574 / Issue Date: 2022/06/01 / Version: 1.0 Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation;

Page 13 of 14

Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN -Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency: EC-Number - European Community number: ECx -Concentration associated with x% response; 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; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; 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: n.o.s. - Not Otherwise Specified: NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate: 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; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail: SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Information Source and References

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

TRINSEO EUROPE GMBH urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current. please contact us for the most current version. NO

Page 14 of 14