



**HARMFUL**

MSDS Ref:  
TR

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## 1. PRODUCT NAME:

# TRI-SET RESIN

## 2. HAZARD IDENTIFICATION



**HARMFUL**

NOTE: In use the product presents minimal risk as the material is largely contained within the cartridge system.

Flammable  
Harmful by inhalation  
Irritating to eyes and skin  
May cause sensitisation

## 3. COMPOSITION

HAZARDOUS INGREDIENT	CAS No.	EC No.	Weight %	Symbols	Risk Phrases
Styrene	100-42-5	601-026-00-0	10-15	Xn	R10,20,36/38
Dibenzoyl peroxide	94-36-0	2023276	2-3	Xi	R2,36,43,7
Dibutyl phthalate	84-74-2	2015574	1-2	None	None

## 4. FIRST AID

CONTACT WITH SKIN:	In case of skin contact wipe off mechanically, and wash affected areas thoroughly with soap and water.
CONTACT WITH EYES:	Rinse carefully and thoroughly with water and seek medical advice.
INGESTION:	<u>DO NOT</u> induce vomiting because of risk of aspiration. Seek medical advice.
INHALATION:	Remove to fresh air, rest half upright position and loosen clothing. Seek medical advice after significant exposure.

## 5. FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:	CO <sub>2</sub> , foam or dry powder.
UNSUITABLE EXTINGUISHING MEDIA:	Halones
EXPOSURE HAZARDS:	If involved in a fire, it will support combustion. Do not breath fumes. Wear suitable protective clothing. Cool closed containers with water.

## 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:	For personal protection see section 8. Remove sources of fire.
ENVIRONMENTAL PRECAUTIONS:	Collect as much as possible in a clean container for reuse or disposal. Do not empty into drains.
CLEAN-UP PROCEDURES:	Sweep into inert containers. Absorb the remainder with dry sand.

## 7. HANDLING AND STORAGE

**HANDLING PRECAUTIONS:**

Observe the necessary precautionary measure for styrene. Ensure adequate ventilation. Do not inhale vapour. Avoid contact with skin and eyes.

**STORAGE INFORMATION:**

Store in cool, well-ventilated conditions away from direct sunlight. Store upright.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION



The usual precautionary measures for handling chemicals should be observed.

Provide adequate ventilation.

Wear suitable gloves of neoprene or synthetic rubber.

Wear eye/face protection.

Wear suitable protective clothing. Launder clothes before use.

**EXPOSURE LIMITS**

Styrene: 100ppm or 420mg/cu.m. (8h T.W.A)

Dibenzoyl peroxide: 5ml/cu.m. (8h T.W.A)

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Paste	Oxidising Properties	None
Odour	Faint	Vapour Pressure	7m bar @ 20 Deg C
pH	7 (50% suspension in water)	Relative density	Base: 1.49 Typical Catalyst: 1.19 Typical
Boiling Point	145°C Decomposes	Bulk density	Not relevant
Melting Point	Not Relevant	Viscosity	No data
Flash Point	Base: 32 deg C Catalyst: Above SADT	Solubility	Insoluble in water
Ignition	Base: 490 deg C Catalyst: 380 deg C	Partition Coefficient	No data
Explosive Properties:	1.1% by volume (lower) 8.0% by volume(upper)	SADT	Catalyst: 50 Deg C

## 10. STABILITY / REACTIVITY

**STABILITY:**

Product is stable and non reactive whilst in cartridge.

**THERMAL DECOMPOSITION:**

The catalyst undergoes self accelerating decomposition at and above 50 Degree C.

**CONDITIONS TO AVOID:**

Temperatures above 30 degrees C. Exposure to direct sunlight. Skin contact may cause skin irritation.

**MATERIALS TO AVOID:**

Direct contact with acids, alkalis, reducing agents or heavy metal salts.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Not determined.

## 11. TOXICOLOGICAL INFORMATION

LD<sub>50</sub> Acute oral toxicity in rats: 5,000mg/Kg.

**SPECIAL PROPERTIES:**

In high concentration styrene has irritating effects on eyes and mucous membranes.

Skin contact may cause skin irritation.



## 12. ECOLOGICAL INFORMATION

Prevent contamination of soil, drains or surface water  
(Styrene) Acute bacterial toxicity; ECOO = 72m/l  
(Catalyst) Acute toxicity (fish) 96h-Lc50 = 2.0mg/l (Poecilia Reticulata)  
(Styrene) Acute toxicity (fish) 48h-Lc50 = 17mg/L (Leuciscus Idus)

## 13. DISPOSAL CONSIDERATIONS

Controlled incineration according to local authority regulations.

## 14. TRANSPORT INFORMATION

UN NO. 1866 (Page 3379)  
ADR/RID Class RN No. 301D  
IMDG/Code 3.3  
IMCO Not classified as hazardous  
ICAO/IATA 3, 1866 III

FLASHPOINT = 32 Degree C (Styrene)  
Flammable  
Marine Pollutant  
Irritating to skin and eyes  
Harmful by inhalation

## 15. REGULATORY INFORMATION

CLASSIFICATION Symbol: Xn – Harmful  
Contains: Resin solution in flammable solvent (Styrene)

LABEL INFORMATION: R10: Flammable  
R20: Harmful by irritation  
R36/38: Irritating to eyes and skin  
S23: Do not breathe vapour

This product is supplied in sealed containers. Although there is no requirement in normal use to work with the constituent raw materials, they are subject to occupational exposure limits (OEL) or occupational exposure standards (OES) as follows:

SUBSTANCE	%BYWEIGHT	LONG TERM EXPOSURE LIMIT (Sh TWA)	SHORT TERM EXPOSURE LIMIT (10 min TWA)
Styrene	10 – 15	100 ppm (420mg/cu.m.)	250ppm (1,050 mg/cu.m.)
Dibenzoyl peroxide	2 – 3	5.0mg/cu.m.	N/A

Refer to other relevant legislation such as the Health and Safety at Work etc Act (HSWA), THE Control of Substances Hazardous to Health Regulations (COSHH), the Environment Protection Act and the Control of Pollution Act.

The information contained in this safety data sheet does not constitute the user's own assessment of workplace risk as required by health and safety legislation.

## 16. OTHER INFORMATION

The information contained in this data sheet is to the best of our knowledge accurate at the date of publication, but we cannot accept responsibility that it is sufficient or correct in all cases.

The data contained herein does not constitute a specification. Such information is available from the technical data sheet for the product.

Abbreviations: OES – occupational exposure standard. STEL – short-term exposure limit. LTEL – long term exposure limit. TWA – time weighted (8 hour) average. LEL – lower explosive limit. UEL – upper explosive limit.