#### SECTION 1: IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY

#### **1.1 Product identifiers**

Product Name	:	ACS Material LumioTech™ Phen-TRZ
Chemical Name	:	2-(10H-Phenoxazine-10-yl)-4,6-diphenyl-1,3,5-triazine
Product Number	:	Phen-TRZ
Brand	:	ACS Material LLC
CAS-No.	:	1357066-21-7

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

Identified uses : These chemicals are intended solely for use in laboratory experiments or research and development. They are not suitable for either drug or household uses.

#### 1.3 Details of the supplier of the safety data sheet

Company	:	ACS MATERIAL LLC
		959 E Walnut, Suite 100
		Pasadena, CA 91106
		USA
Telephone	:	+1 (866)-227-0656
Fax	:	+1 (781)-518-0284

#### 1.4 Emergency telephone number

Europe	:	112 or 999
Asia	:	110 (China, Japan, Taiwan), 119
North America	:	911
South America	:	911
Africa	:	As appropriate for your country
Australia	:	000 (Australia), 111 (New Zealand)

### **SECTION 2: HAZARDS IDENTIFICATION**

### 2.1 Classification of the substance or mixture

Regulation (EC)No.1272/2008(CLP)

Skin Irrit.2: Causes skin irritation. Eye Irrit.2: Causes serious eye irritation. STOT SE 3: May cause respiratory irritation.

#### 2.2 GHS Label elements, including precautionary statements

According to Regulation (EC)No.1272/2008(CLP)



Pictogram	GHS07
Signal word	Warning
Hazard statement(s)	5
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
Precautionary statement(s	6)
P302 + P352	IF ON SKIN: Wash with plenty of water.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes.
	Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER or doctor if you feel unwell.
P337 +P313	If eye irritation persists: Get medical advice/attention.

#### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

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This substance/mixture does not include any components that are deemed to be persistent, bioaccumulative and toxic (PBT)or very persistent and very bioaccumulative (vPvB) at concentrations of 0.1%or more. This safety data sheet contains additional precautionary statements in other sections.

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

Substance name	:	2-(10H-Phenoxazine-10-yl)-4,6-diphenyl-1,3,5-triazine
Chemical formula	:	$C_{27}H_{18}N_4O$
CAS-No	:	7440-44-0
Molecular weight	:	414.46 g/mol
Synonyms	:	DPhPXZT

#### Mixtures

No applicable

#### **SECTION 4: FIRST AID MEASURES**

#### 4.1 Description of first aid measures

#### **General advice**

First aiders should ensure they have taken adequate steps to protect themselves from exposure (see Section 8 for recommended personal protection equipment) Show this safety data sheet to the doctor in attendance.

#### If inhaled



Take the individual to an area with clean air and ensure they are comfortable for breathing. Seek medical attention if any discomfort or illness is experienced

#### In case of skin contact

Remove contaminated clothing and shoes. Cleanse affected areas with water and soap. Take the affected person to the hospital right away and seek medical advice. Rinse the skin with water, and if any irritation is noticed, seek medical advice or attention.

#### In case of eye contact

Carefully rinse with water for several minutes. If contact lenses are being worn, remove them if it's easy to do so, and continue flushing. Rinse the affected area with abundant water for at least 15 minutes and seek medical advice.

#### If swallowed

Wash mouth with water. If you experience any discomfort or illness, seek medical attention. Do not induce vomiting and refrain from giving anything by mouth to an unconscious person.

- **4.2** Most important symptoms and effects, both acute and delayed The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.
- **4.3** Indication of any immediate medical attention and special treatment needed Treat symptomatically.

#### **SECTION 5: FIREFIGHTING MEASURES**

#### 5.1 Extinguishing media

**Suitable extinguishing media** As appropriate for surrounding fire

Unsuitable extinguishing media No data

### 5.2 Special hazards arising from the substance or mixture

In combustion toxic fumes may form.

Carbon oxides

Nitrogen oxides (NO<sub>X</sub>)

#### 5.3 Advice for firefighters

Firefighters should wear complete protective clothing including self-contained breathing apparatus.

#### 5.4 Further information

Use a water spray to control (reduce)gases/vapors/mists and avoid contamination of surface water or the groundwater system by the water used to extinguish the fire.

#### SECTION 6: ACCIDENTAL RELEASE MEASURES



#### 6.1 Personal precautions, protective equipment and emergency procedures

Abide by the safe handling guidance and use the suggested personal protective equipment (section 8). Ensure there is sufficient ventilation, wear respiratory protection, and avoid producing dust. Stay clear of inhaling gas, mist, or vapors. Make sure that there is adequate ventilation and evacuate individuals to a secure location. Do not undertake any action without proper protective gear. Section 8 provides guidelines for personal protection.

#### 6.2 Environmental precautions

Avoid release to the environment.

#### 6.3 Methods and materials for containment and cleaning up Clean up the spilled material by sweeping, but try to avoid generating dust. Where feasible, use vacuum equipment to collect the spilt substance. Dispose of the contents based on the local, state, or national laws.

**6.4 Reference to other sections** For disposal see section 13.

#### **SECTION 7: HANDLING AND STORAGE**

#### 7.1 Precautions for safe handling

#### Advice on safe handling

Avoid breathing, swallowing, and making contact with the skin and eyes. Only use the substance in a place with good ventilation. Put on protective clothing as advised in section 8.

#### **Hygiene measures**

Keep away from food and drink. Wash hands after handling, before breaks, and at the end of workday.

#### **Fire Protection**

Normal measures for preventive fire protection.

#### 7.2 Conditions for safe storage, including any incompatibilities

General	Store in a well-ventilated place. Keep container tightly closed and dry.
Storage temperature	Ambient.
Storage life	Product is light sensitive. Store in the dark.
Incompatible materials	Not known.
Storage Class	-

#### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION



#### 8.1 Control Parameters

#### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

#### 8.2 Exposure Controls Appropriate engineering controls

Make certain that there is sufficient ventilation and/or exhaust. Ensure that there is a washing facility with water available for the purpose of cleansing the eyes and skin.

#### 8.3 Personal protective equipment

#### Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

#### Hand protection

Use gloves. Before using gloves, inspect them carefully. Use an appropriate technique to remove the gloves, ensuring that the outer surface of the gloves is not touched to avoid coming into contact with the substance, After use dispose of contaminated gloves according to the appropriate regulations and good laboratory practices. Wash and dry hands after removing gloves. The gloves selected must meet the specifications of Regulation EU) 2016/425 and the standard EN 374.

#### **Body Protection**

Select appropriate body protection depending on the type, concentration, and quantity of hazardous substances present and the particular workplace conditions.

#### **Respiratory protection**

Under normal circumstances no personal respiratory protection is necessary.

#### **Thermal hazards**

Not known

#### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

- 1) Appearance
- 2) Odor
- 3) Odor Threshold
- 4) Melting Point/Freezing Point
- 5) Initial Boiling Point and Boiling Range
- 6) Flammability
- 7) Upper/Lower Explosion Limit
- 8) Flash Point
- 9) Auto-Ignition Temperature (°C)
- 10) Decomposition Temperature

Form: solid Color: yellow No data available No data available TGA:>300 C (0.5%weight loss) No data available No data available



- 11) pH
- 12) Kinematic Viscosity
- 13) Solubility (IES)
- 14) Partition Coefficient: N- Octanol/Water (Log Value)
- 15) Vapor Pressure
- 16) Density
- 17) Relative Density
- 18) Relative Vapor Density
- 19) Particle Characteristics

No data available No data available Water: No data available Other: No data available No data available

No data available No data available No data available No data available No data available

# 9.2 Other safety information No data available

### SECTION 10: STABILITY AND REACTIVITY

- **10.1 Reactivity** None anticipated.
- **10.2** Chemical stability The product is chemically stable under recommended conditions.
- **10.3 Possibility of hazardous reactions** No data available.
- **10.4 Conditions to avoid** No data available.
- **10.5 Incompatible materials** None known.
- **10.6 Hazardous decomposition products** In case of fire: see SECTION 5.

### SECTION 11: TOXICOLOGICAL INFORMATION

#### 11.1 Information on toxicological effects

#### Acute toxicity

Ingestion :	No data available.
Cluip contact i	Na data availabla

- Skin contact : No data available.
- Inhalation : No data available.

### Skin corrosion/irritation

Causes skin irritation.

#### Serious eye damage/eye irritation



## **ACS Material LLC**

Causes serious eye irritation.

**Respiratory or skin sensitization** No data available.

Germ cell mutagenicity No data available.

#### Carcinogenicity

No data available.

**Reproductive toxicity** No data available.

**Lactation** No data available.

**Specific target organ toxicity - single exposure** May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure** No data available.

**Aspiration hazard** No data available.

Additional Information

RTECS: No data available. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

#### 11.2 Information on other hazards

According to current knowledge there has not been a comprehensive investigation of the chemical, physical, and toxicological characteristics. Endocrine disrupting properties: No data available. Information on other hazards: No data available.

#### SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

No data available.

- **12.2 Persistence and Degradability** No data available.
- **12.3 Bioaccumulative Potential** No data available.
- **12.4 Mobility in soil** No data available.
- 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 Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

#### 12.7 Other adverse effects

No data available

#### **SECTION 13: DISPOSAL CONSIDERATIONS**

#### 13.1 Waste treatment methods

Dispose of the product in accordance with the regulations of the local, state or national authorities. Recycling should be carried out only for fully emptied packaging. The recommended method for disposal is through incineration managed by a licensed disposal contractor. Alternatively, send the product to a licensed recycler, reclaimer or incinerator.

#### 13.2 Additional information

Disposal should be in accordance with local, state or national legislation.

#### **SECTION 14: TRANSPORT INFORMATION**

UN number ADR/RID: - IMDG: - IATA: -

UN proper shipping name ADR/RID: not dangerous IMDG: not dangerous IATA: not dangerous

Transport hazard class(es) ADR/RID: - IMDG: - IATA: -

Packaging group ADR/RID: - IMDG: - IATA: -

#### **Environmental hazards**

ADR/RID: no IMDG: no IATA: no

#### Special precautions for user

This substance does not meet the criteria for classification as hazardous according to transportation regulations.

#### **SECTION 15: REGULATORY INFORMATION**

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



## **ACS Material LLC**

European regulations-authorizations and/or restrictions on use	
Candidate list of substances of very high concern for authorization.	not listed
Reach: annex xiv list of substances subject to authorization.	not listed
Reach: annex xvii restrictions on the manufacture, placing on the market	not listed
and use of certain dangerous substances, mixtures and articles.	
Community rolling action plan (CORAP).	not listed
Regulation (EC)N° 850/2004 of the European parliament and of the	not listed
council on persistent organic pollutants.	
Regulation (EC)N° 1005/2009 on substances that deplete the ozone	not listed
layer.	
Regulation (EU)N° 649/2012 of the European parliament and of the	not listed
council concerning the export and import of hazardous chemicals.	

#### National regulation:

Other not known

### 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

#### **SECTION 16: OTHER INFORMATION**

The following sections contain revisions or new statements: No data available.

#### LEGEND

Acronyms	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous
CAS	Goods by Road Chemical Abstracts Service
CLP	Regulation (EC)No 1272/2008 on classification, labelling and packaging of substances and mixtures
DNEL	Derived No Effect Level
EC	European Community
EINECS	European Inventory of Existing Commercial Chemical Substances
ΙΑΤΑ	International Air Transport Association
IBC	Intermediate Bulk Container
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
LTEL	Long term exposure limit
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
STEL	Short term exposure limit



STOTSpecific Target Organ ToxicityUNUnited NationsvPvBvery Persistent and very Bioaccumulative

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