SAFETY DATA SHEET



Revision date 20-Dec-2022 Revision Number 1

1. Identification

Product identifier

Product Name TP42PD, UV FLUORESCENT A/C OIL + DYE, R-1234YF/PAG

Other means of identification

Product Code(s) TP42PD

UN number or ID number UN3082

Synonyms TP42PD-5

Recommended use of the chemical and restrictions on use

Recommended use Refrigerant leak detection

Restrictions on use No information available

Details of the supplier of the safety data sheet

Manufacturer

Spectronics Corporation 265 Spagnoli Road Melville, NY 11747 USA

E-mail address sds@spectroline.com

Emergency telephone number

Emergency Telephone US & Canada: 800-424-9300 (24 HOURS CHEMTREC)

Outside US & Canada: +1 703-741-5970 (24 HOURS CHEMTREC)

2. Hazard(s) identification

Classification

Skin sensitization	Category 1
Reproductive toxicity	Category 2

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Warning

Hazard statements

May cause an allergic skin reaction

Suspected of damaging fertility or the unborn child



Appearance No information available Physical state Liquid Odor Slight

Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood Wear protective gloves/protective clothing/eye protection/face protection Avoid breathing dust/fume/gas/mist/vapors/spray Contaminated work clothing must not be allowed out of the workplace

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention IF ON SKIN: Wash with plenty of water and soap If skin irritation or rash occurs: Get medical advice/attention Wash contaminated clothing before reuse

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other information

Causes mild skin irritation. Toxic to aquatic life with long lasting effects. Harmful to aquatic life.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Chemical name	CAS No.	Weight-%	Trade secret
PAG Oil	Trade secret	90 - 100%	*
decyloxirane	2855-19-8	1-3	*
Tris(methylphenyl) phosphate	1330-78-5	0-1	*

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation

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or allergic reactions see a physician.

Ingestion Rinse mouth.

Most important symptoms and effects, both acute and delayed

Symptoms Itching. Rashes. Hives. Prolonged contact may cause redness and irritation.

Indication of any immediate medical attention and special treatment needed

Note to physicians May cause sensitization in susceptible persons. Treat symptomatically.

5. Fire-fighting measures

surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the

chemical

Product is or contains a sensitizer. May cause sensitization by skin contact.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal

protective equipment as required. Evacuate personnel to safe areas. Keep people away

from and upwind of spill/leak.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Remove contaminated clothing and shoes.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up.

8. Exposure controls/personal protection

Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering controls Showers

> Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves.

Wear suitable protective clothing. Skin and body protection

No protective equipment is needed under normal use conditions. If exposure limits are Respiratory protection

exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands before breaks and

immediately after handling the product.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Liquid

Appearance No information available

Color amber Odor Slight

Odor threshold No information available

Property Values Remarks • Method

No data available None known pН Melting point / freezing point No data available None known Initial boiling point and boiling rangeNo data available None known None known 180 °C / 356 °F Flash point **Evaporation rate** No data available None known **Flammability** No data available None known Flammability Limit in Air None known

Upper flammability or explosive

No data available

limits Lower flammability or explosive

No data available

limits

Vapor pressure No data available None known No data available Relative vapor density None known Relative density 0.864 None known Water solubility Insoluble in water None known Solubility(ies) No data available None known

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Partition coefficientNo data availableNone knownAutoignition temperatureNo data availableNone knownDecomposition temperatureNone knownKinematic viscosity42 mm²/s@ 40 °CDynamic viscosityNo data availableNone known

Other information

Explosive properties
Oxidizing properties
No information available
VOC content
No information available
No information available
No information available
No information available

10. Stability and reactivity

Reactivity No information available.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid None known based on information supplied.

Incompatible materialsNone known based on information supplied.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available.

Eye contact Specific test data for the substance or mixture is not available.

Skin contact May cause sensitization by skin contact. Specific test data for the substance or mixture is

not available. Repeated or prolonged skin contact may cause allergic reactions with

susceptible persons. (based on components). Causes mild skin irritation.

Ingestion Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Itching. Rashes. Hives. Prolonged contact may cause redness and irritation.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

 ATEmix (oral)
 99,999.00
 mg/kg

 ATEmix (dermal)
 99,999.00
 mg/kg

 ATEmix (inhalation-gas)
 99,999.00
 ppm

 ATEmix (inhalation-dust/mist)
 99,999.00
 mg/l

 ATEmix (inhalation-vapor)
 99,999.00
 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Tris(methylphenyl) phosphate 1330-78-5	> 20000 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 5.2 mg/L (Rat)4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritationClassification based on data available for ingredients. Causes mild skin irritation.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity Contains a known or suspected reproductive toxin. Classification based on data available

for ingredients. Suspected of damaging fertility or the unborn child.

STOT - single exposure No information available.

STOT - repeated exposureNo information available.

Aspiration hazard No information available.

Other adverse effects No information available.

Interactive effects No information available.

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects. Harmful to aquatic life.

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Tris(methylphenyl)	-	LC50: 0.1 - 0.22mg/L	-	-
phosphate		(96h, Lepomis		
1330-78-5		macrochirus)		
		LC50: 0.21 - 0.32mg/L		
		(96h, Oncorhynchus		
		mykiss)		
		LC50: 3.3 - 6.2mg/L (96h,		
	Oncorhynchus mykiss)			
		LC50: 20.4 - 41.2mg/L		
		(96h, Lepomis		
		macrochirus)		
		LC50: 3.2 - 10mg/L (96h,		
		Oryzias latipes)		
		LC50: 4.8 - 6.4mg/L (96h,		
		Poecilia reticulata)		

Persistence and degradability No information available.

Bioaccumulation

Component Information

Partition coefficient	
5.93	

Other adverse effects No information available.

13. Disposal considerations

Disposal methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Contaminated packagingDo not reuse empty containers.

14. Transport information

DOT

UN number or ID number UN3082

Proper shipping name Environmentally hazardous substance, liquid, n.o.s.

Transport hazard class(es) 9
Packing group ||

Special Provisions 8, 146, 173, 335, 441, IB3, T4, TP1, TP29

DOT Marine Pollutant

Marine pollutant Phosphoric acid, tris(methylphenyl) esters

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Phosphoric acid,

tris(methylphenyl) esters), 9, III, Marine pollutant

Emergency Response Guide

Number

mher

TDG

UN number or ID number UN3082

UN proper shipping name Environmentally hazardous substance, liquid, n.o.s.

Transport hazard class(es)

Packing group

Special Provisions

Marine pollutant name

9

III

16, 99

decyloxirane.

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (decyloxirane), 9, III

MEX

UN number or ID number UN3082

UN proper shipping name Environmentally hazardous substance, liquid, n.o.s.

Transport hazard class(es) 9
Packing group |||

Technical Name decyloxirane, Tris(methylphenyl) phosphate

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (decyloxirane,

Tris(methylphenyl) phosphate), 9, III

Special Provisions 274, 331, 335, 375

ICAO (air)

UN number or ID number UN3082

UN proper shipping name Environmentally hazardous substance, liquid, n.o.s.

Transport hazard class(es)

Packing group

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (decyloxirane,

Tris(methylphenyl) phosphate), 9, III

A97, A158, A197, A215 **Special Provisions**

IATA

UN number or ID number UN3082

UN proper shipping name Environmentally hazardous substance, liquid, n.o.s.

Transport hazard class(es)

Ш Packing group

Technical Name decyloxirane, Tris(methylphenyl) phosphate

UN3082, Environmentally hazardous substance, liquid, n.o.s. (decyloxirane, Description

Tris(methylphenyl) phosphate), 9, III

Special Provisions A97, A158, A197, A215

ERG Code 9L

IMDG

UN number or ID number UN3082

UN proper shipping name Environmentally hazardous substance, liquid, n.o.s.

Transport hazard class(es) Packing group Ш F-A, S-F EmS-No. 274, 335, 969 **Special Provisions**

Marine pollutant

Marine Pollutant decyloxirane, Tris(methylphenyl) phosphate

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (decyloxirane,

Tris(methylphenyl) phosphate), 9, III, Marine pollutant

RID

UN number or ID number UN3082

UN proper shipping name Environmentally hazardous substance, liquid, n.o.s.

Transport hazard class(es) Packing group Ш Classification code M6

274, 335, 375, 601 **Special Provisions**

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (decyloxirane,

Tris(methylphenyl) phosphate), 9, III

ADR

UN number or ID number UN3082

UN proper shipping name Environmentally hazardous substance, liquid, n.o.s.

Transport hazard class(es) Ш **Packing group** Classification code M6 **Tunnel restriction code** (-)

274, 335, 601, 375 **Special Provisions**

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (decyloxirane,

Tris(methylphenyl) phosphate), 9, III, (-)

ADN

UN number or ID number UN3082

UN proper shipping name Environmentally hazardous substance, liquid, n.o.s.

Transport hazard class(es) Ш Packing group Classification code M6

Special Provisions 274, 335, 375, 601

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (decyloxirane,

Tris(methylphenyl) phosphate), 9, III

PΡ **Equipment Requirements**

15. Regulatory information

International Inventories

TSCA Complies.
DSL/NDSL Complies.
EINECS/ELINCS Complies.
ENCS Complies.
IECSC Complies.
KECI Complies.

PICCS Does not comply.

AIIC Complies. NZIOC Complies.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances
 IECSC - China Inventory of Existing Chemical Substances
 KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AllC - Australian Inventory of Industrial Chemicals **NZIoC** - New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Tris(methylphenyl) phosphate	X	-	-
1330-78-5			

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA Health hazards 2 Flammability 1 Instability 0 Special hazards - HMIS Health hazards 2 Flammability 1 Physical hazards 0 Personal protection X

Chronic Hazard Star Legend *= Chronic Health Hazard

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: Exposure controls/personal protection

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value Sk* Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA) EPA (Environmental Protection Agency) Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

World Health Organization

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Revision NoteNo information available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet