



Version 1.0 (01/06/10)

1. Identification of the substance

Chemical Name: ProSafe TS+ (Liquid Scintillation Cocktail)
Product Code: PSTS+
Supplier: Meridian
5 West Street
EPSOM
Surrey KT18 7RL
Telephone: 01372 749783
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2. Composition

Solution containing the following components:

50-70% Di-isopropylnaphthalene	CAS # 38640-62-9
20-40% Alcohol Ethoxylate	CAS # 84133-50-6
2-8% Docusate sodium salt	CAS # 577-11-7
2-8% 2-(2-butoxyethoxy)ethanol	CAS # 112-34-5
2-8% Alcohol ether phosphate ester	N/A mixture
1-3% Diethanolamine	CAS # 111-42-2
0.1-1% 2,5-diphenyloxazone	CAS # 92-71-7
0.1-1% 1,4-bis(4-methyl-alpha-styryl)benzene	CAS # 13280-61-0

3. Regulatory Information

Classification & Symbol

**Risk Phrases**

R36/38 Irritating to eyes and skin.

Safety Phrases

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

4. First Aid Measures

General information:

Immediately remove any contaminated clothing and wash with copious amounts of soapy water.

Eye contact:

Wash eyes with flowing water for 10 minutes, gently prising open eyelids to ensure efficient washing. All eye injuries from chemicals should be seen by a doctor.

Skin contact:

Remove any contaminated clothing. Wash the affected area with copious amounts of soapy water.

Ingestion:

Do not induce vomiting except in the presence of, or on the orders of a doctor. Seek medical help and take this data sheet. If chemical is confined to the mouth, then wash out mouth and allow patient to swallow mouthwash. If patient is conscious then give water to drink to dilute the chemical in the stomach. If unconscious then put patient in the recovery position.

Inhalation:

Inhalation is not normally a problem because of the low vapour pressure. In general, overexposure to high atmospheric concentrations of alkyl-substituted aromatics may produce central nervous depression, headache, dizziness, incoordination, nausea and loss of appetite. Remove to fresh air. If not breathing, give artificial respiration and get medical attention immediately.

5. Fire Fighting Measures

Suitable extinguishing media:

Dry powder, water spray, foam.

Specific hazards during fire fighting:

Heating or fire can release Carbon Monoxide.

Special protective equipment for Fire fighters:

In the event of fire, wear self contained breathing apparatus.

6. Accidental Release Measures

Personal precautions: Wear eye protection and gloves.

Environmental precautions: Absorb spill with inert material (vermiculite, sand or earth) then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing personal precautions. Provide ventilation.

7. Handling and Storage

Handling:

Wash thoroughly after handling. Use only in a well ventilated area. Do not breath vapour, mist or gas. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Do not ingest or inhale. Discard contaminated shoes.

Storage:

Keep container closed when not in use. Store in a cool, dry, well-ventilated area away from Direct sunlight.

Engineering controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

8. Exposure controls and personal protection

Exposure limits:

The product does not contain any relevant quantities of materials with critical values that have to be monitored in the workplace.

Personal protective equipment:

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

9. Physical and chemical properties

Molecular formula:	Solution
Physical state:	Liquid
Colour:	Colourless
Odour:	Characteristic
Solubility in water:	<10ppm
Vapour pressure:	0.0005 mm Hg at 20 deg C (68 deg F)
Boiling point:	290-305 deg C (554-581 deg F)
Autoignition temp:	Not available
Flash point:	149 deg C
Density at 20 deg C:	1.00 g/cm ³

10. Stability and Reactivity

Chemical stability: Stable

Conditions to avoid: Excess heat

Incompatibilities with other materials: Strong oxidizing materials

Hazardous decomposition products: Combustion can produce oxides of carbon.

Hazardous reactions: Stable under normal conditions

11. Toxicological Information**CAS# 38640-62-9**Oral LD₅₀ 3900 mg/kg (rat)Dermal LD₅₀ 4500 mg/kg (rat)**Primary irritant effect:****Skin:** No irritant effect.**Eye:** No irritating effect.**Sensitization:** No sensitizing effects known.**Additional toxicological information:**

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us. The substance is not subject to classification.

CAS # 84133-50-6

Acute toxicity

Peroral:

LD₅₀ (rat) 8.57 (5.80-12.68) ml/Kg

Percutaneous:

LD₅₀ (rabbit) 4.00 (2.45-6.53 ml/Kg (occluded)

Inhalation:

Dynamic generation of substantially saturated vapour Rat; 8 hour;
Room temperature. Mortality: 0/6

Irritation:

Skin; Rabbit; 4 h uncovered – erythema

Eye; Rabbit; 0.02ml – moderate corneal injury

CAS # 112-34-5

Acute toxicity:

Oral, rat, LD₅₀ 5660 mg/KgOral, mouse, LD₅₀ 2400 mg/Kg

Intraperitoneal:

Mouse, LD₅₀, 850 mg/KgRabbit, oral, LD₅₀, 2200 mg/KgRabbit, skin, LD₅₀, 2700 mg/KgGuinea pig, oral, LD₅₀, 2000 mg/Kg

Irritation

Eyes, Rabbit, 20 mg: Severe irritation effect

Eyes, Rabbit, 20 mg, 24H: Moderate irritation effect

CAS # 577-11-7

Acute toxicity

Oral, rat, LD₅₀ 1900 mg/KgOral, mouse, LD₅₀ 2643 mg/Kg

Intraperitoneal:

Rat, LD₅₀, 590 mg/Kg

Intravenous:

Mouse, LD₅₀, 60 mg/Kg

Irritation

Skin, Rabbit, 24H, 10 mg: Moderate irritation effect

Eyes, Rabbit, 1%: Severe irritation effect

12. Ecological information

CAS# 38640-62-9

This product is poorly soluble in water, highly sorptive to suspended matter in water and sediments, and susceptible to biodegradation when present in water under aerated conditions. Biodegradation is expected in a waste water treatment plant.

CAS # 84133-50-6

Environmental fate:

Modified Sturm Test (OECD 301E) (% CO₂ evolved) – Day 28 = 89.4%

Closed Bottle Test (OECD 301D) (% Oxygen consumption) – Day 28 = 90%

CAS # 112-34-5

Bioaccumulation potential: No indication of bioaccumulation.

ECOTOXICOLOGICAL EFFECTS

Test Type: LC₅₀ Fish (*Leuciscus idus*); 48 H; > 1,000 mg/l

Test Type: EC₅₀ Daphnia (*Daphnia magna*); 48 H; > 100 mg/l

Test Type: IC₅₀ Algae (*Scenedesmus subspicatus*); 24 H; > 100 mg/l

CAS # 577-11-7

ECOTOXICOLOGICAL EFFECTS

Test Type: LC₅₀ Fish *Onchorhynchus mykiss*(Rainbow Trout); 96 H; 28 mg/l

13. Disposal Considerations

Recommended disposal, including packaging is by incineration in a suitable installation when in accordance with local regulations.

14. Transport Information

Not a hazardous material for DOT shipping.

15. Regulatory Information

European/International Regulations

European labeling in accordance with EC Directives.

Hazard Symbols: Irritant

Risk Phrases: R36/38 Irritating to eyes and skin.

Safety Phrases

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39 Wear suitable protective clothing gloves and eye/face protection.

TSCA (Toxic Substances Control Act)

CAS# 6196-95-8 is listed

CAS# 84133-50-6 is listed

CAS # 112-34-5 is listed

16. Other Information

The information above is believed to be accurate and represents the best currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use.

Users should carry out their own investigation to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third part or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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