MATERIAL SAFETY DATA SHEET

ZChek – PT Aerosol

Prepared according to the Hazard Communication Standard (CFR 29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015
Prepared: Dec-22 Supersedes: 05

Section 1: Product and Company Identification

1.1 Product Name: ZChek- PT-Aerosol

1.2Product Use: Penetrant for Dye Penetrant Inspection Process.
1.3Manufacturer Information:ZChem Specialities Private Limited.
Sy. No.11/2/6, Puradapalya Village Tavarekere Hobli, Bangalore,Karnataka-562130, India
Website: www.zchem.in
Emergency Telephone Number: +91-9959963334

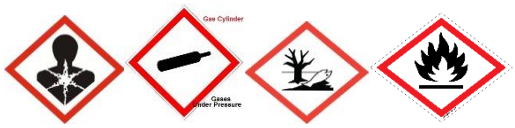
Section 2: Hazards Identification

2.1Hazard Classification

This product is hazardous under the criteria of the hazardous product regulation as implemented under WHMIS 2015
H225 Flammable Liquids: Category 2
H319 Eye irritation: Category 2A
H336 Specific Target Organ Toxicity: Single exposure- Category 3
H220 Flammable Aerosol: Category 1
Gases under pressure- Compressed Gases

2.2 Label Elements

· Labelling according to Regulation (EC) No 1272/2008 The product is classified and labeled according to the CLP regulation.



Hazard pictograms

Signal word: **Danger**

2.3 Hazard - determining components of labeling:

- Flammable aerosol. Contains gas under pressure; may explode if heated.
- Distillates, petroleum, hydro treated
- Highly refined, low viscosity, base oil
- Solvent naphtha, heavy aroma.

Hazard Statements

- H315 Causes skin irritation.
- H351 Suspected of causing cancer.
- H318 Cause serious eye irritation.
- H336 May cause drowsiness or dizziness.

2.4 Precautionary statements

- P280 Wear protective
- P301+P310+P331 If swallowed: Immediately call a doctor. Do not induce vomiting.
- P305+P351+P338 If in eyes- rinse cautiously with water for several minutes.
- P302+P352Wash skin thoroughly after handling.
- P405Keep container tightly closed.

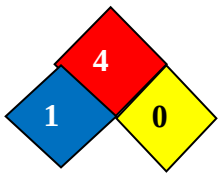
2.5 Classification system

HMIS- ratings (scale0-4)

Health -1
Fire -4
Reactivity -0

NFPA–ratings (scale0-4)

Fire- 4
Health-1
Reactivity-0



2.6 Other hazards

Results of PBT and vPvB assessment
PBT: Not applicable
vPvB: Not applicable

Section 3 – Information on Ingredients

Ingredient	CAS#	Wt/wt%
Distillates (petroleum), hydrotreated light	64742-47-8	50-60%
Distillates,(petroleum), hydrotreated light naphthenic	64742-53-6	15-25%
LPG	68476-86-8	20-30%

Section 4 –First Aid Measures

Eyes: Rinse carefully using plenty of water.

Skin: Remove contaminated shoes and clothing. Clean affected area thoroughly with mild soap and water. DO NOT use ointments. Seek medical attention if irritation persists.

Inhalation: Immediately move victim to fresh air. If victim is not breathing, immediately begin rescue breathing. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). If breathing is difficult, seek medical attention immediately.

Ingestion: DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If spontaneous vomiting is about to occur, place victim's head below knees. If victim is drowsy or unconscious, place on the left side with head down. DO NOT leave victim unattended. Seek medical attention immediately.

Section 5: Fire Fighting Measures

5.1 Extinguishing media

Suitable extinguisher agents:

- CO2, sand, extinguishing powder. Do not use water.
- Water haze
- Foam
- ABC Powder

For safety reasons unsuitable extinguishing agents: Water with full jet.

5.2 Special hazards arising from the substance or mixture Spray cans are under pressure**.** Carbon monoxide and carbon dioxide,

5.3 Advice for fire fighters

Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment, and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

6.2 Environmental precautions: Do not allow to enter sewers, surfaces, or ground water.

6.3 Methods and material for containment and cleaning up:

- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- Ensure adequate ventilation.
- Do not flush with water or aqueous cleansing agents.
- Collect liquid in an appropriate container or absorb with an inert material such as vermiculite, dry sand, or earth; DO NOT use combustible materials.
- Place in a chemical waste container.

Section 7: Handling and Storage

7.1Prevention for safe handling:

- DO NOT spray into or around ignition sources. DO NOT allow material to come in contact with eyes or skin. Wear appropriate protective equipment during handling. Keep container closed. Avoid breathing vapors or mists. Use only with adequate ventilation. Wash thoroughly after handling.
- Protect against electrostatic charges.
- DO NOT expose to temperature above 120^0 F (50^0C).
- Use explosion-proof apparatus/fittings and spark-proof tools.
- Containers may be hazardous when empty since residue liquid and vapors may be present.

7.2 Conditions for safe Storage:

- No smoking.
- Store in cool, dry conditions in well-sealed receptacles. Do not spray around arcs or flame.

Section 8: Exposure Controls and Personal Protection

8.1 Control Parameters

Components with limit values that require monitoring at the workplace:

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

ACGIH TLV – 5mg/m3 OSHA PEL 5mg/m3

Highly refined, low viscosity, base oil 5 mg/m3 as mist 5 mg/m3 as mist ·

Additional information: The lists that were valid during the creation were used as basis

8.2 Exposure controls ·

Personal protective equipment: ·

General protective and hygienic measures:

Keep away from foodstuffs, beverages, and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Breathing equipment: In case of brief exposure or low pollution use respiratory filter device.

In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Ventilation System: A system of local or general exhaust is recommended to keep employee exposure below the airborne exposure limits. If exposure limit is exceeded use organic vapor respirator (type A), or self-contained breathing apparatus. ·

Protection of hands: Protective gloves the glove material must be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation ·

Material of gloves: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application. ·

Penetration time of glove material the exact break through time has to be found out by the manufacturer of the protective gloves and has to be observe.

General Hygiene Considerations: Wash thoroughly after handling. Have eye-wash facilities immediately available.

Section 9: Physical and Chemical Properties

Appearance:
Form : Aerosol: Spray can under pressure. Red liquid
Color: Red
Odor: Characteristic
Odor threshold: Not determined
pH value: Not applicable
Melting point: Not determined
Boiling point: Not determined
Flammability (solid, gaseous)- Flammable
Flash point(bulk): 103 deg.C
Ignition temperature: No data available
Decomposition temperature: Not determined
Auto-ignition temperature- Product is not self igniting
Danger of explosions: Can under pressure with a flammable gas.
Explosions limits: No data available
Vapour pressure at 20 deg.C: Not determined
Solubility /miscibility with water: No data available
Partition Coefficient: Not determined
Viscosity:
Dynamic- Not determined
Viscosity- No data available
VOC Content: Not applicable
Evaporation rate: Not applicable

Section 10: Stability and Reactivity

Stability: Stable.
Conditions to Avoid: Keep away from heat and ignition sources.
Incompatibility: None
Hazardous Decomposition: When burning, soot, oxides of carbon and nitrogen.
Reactivity: None.

Section 11: Toxicological Information

Primary irritant effect

Acute toxicity: Information on hazardous ingredients ·
Primary irritant effect: on the skin:
No irritant effect,on the eye: Strong irritant with the danger of severe eye injury.
swallowed: Risk of entering lungs if aspirated. ·
Sensitization: No sensitizing effects known.

Additional toxicological information:	LD50Oral(rat)	LD50Dermal(rat/rabbit)
Distillates (petroleum), hydrotreated light	>5000 mg/kg rabbit	3.7 Max score is 8.0
Highly refined, low viscosity, base oil	>2000 mg/kg	>2000 mg/kg

Di-isononylphthalate: Assessment of repeated dose toxicity: Repeated exposure to high doses of the substance causes reversible liver changes in rodents. According to present knowledge, these effects do not occur in man. Effects on the kidney of male rats were detected after repeated exposure. These effects are specific for the male rat and are known to be of no relevance to humans. Carcinogenic categories ·

IARC (International Agency for Research on Cancer) None of the ingredients is listed. · NTP (National Toxicology Program) None of the ingredients is listed. · OSHA-Ca (Occupational Safety & Health Administration) None of the ingredients is listed.

Carcinogenic categories

• **IARC(International Agency for Research of Cancer)-** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen.
• **ACGIH(American Conference of Governmental Industrial Hygienists)-** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen.
• **NTP (National Toxicology Program) –** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen.
• **OSHA-Ca (Occupational Safety and Health Administration)**- No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen.

Section 12: Ecological Information

12.1.Ecology: General: May cause long term adverse effect in the aquatic environment.
12.2. Persistence and degradability: No further relevant information available.
12.3. Bioaccumulative potential: No further relevant information available
12.4. Mobility in soil: No further information available.
Water hazard class1(self- assessment): slightly hazardous for water.

- Ecotoxical effects:
  Remarks : Toxic for fish

Section 13: Disposal Considerations

13.1. Waste treatments methods

Recommendation:

- Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- Waste/unused products
- Collect all waste in suitable and labeled containers and dispose according to local legislation.

13.2. Un-cleaned packaging's:

Recommendation:
Waste/used products
Waste products and empty packages dispose of in accordance with local regulations.
Empty containers may contain flammable residue and vapor

Section 14: Transport Information

14.1 UN –Number DOT, ADR,IMDG,IATA	Consumer commodity ORM-D UN 1950
14.2 UN proper shipping name • DOT - • ADR, IMDG,IATA	Consumer commodity ORM-D Aerosols, flammable
14.3 Transport Hazard class(es) **DOT**  	Class – Not applicable ORM-D
ADR, IMDG,IATA 	Class – Aerosols flammable, 2.1 Flammable gas, 2.1
14.4 Packing group DOT ADR,IMDG,IATA	Not applicable None
14.5 Environmental hazards Marine pollutant	Not applicable
14.6 Special precautions for user	Warning: Flammable Gas
Transport/ Additional information: DOT Quantity limitations On passenger aircraft/ railway :- 75 kg On cargo aircraft only:- 150 kg	

Section 15: Regulatory Information

15.1 Safety, Health and Environmental Regulations/ Legislation specific for the substance or mixture.

- **SARA:-** Section 355 (extremely hazardous substances): None of the ingredients is listed.
- **Section 311/312** Fire hazard Acute health hazard
- **Section 313**(Specific toxic chemical listings) 91-20-3 Naphthalene
- **TSCA (Toxic Substance Control Act):-**All components listed
- **Proposition 65**
- **Chemicals Known to cause cancer:** None of the ingredients is listed.
- **Chemicals known to cause reproductive toxicity for females:** None of the ingredients is listed
- **Chemicals known to cause reproductive toxicity for males:** None of the ingredients is listed
- **Chemicals known to cause developmental toxicity:** None of the ingredients is listed
- Carcinogenicity Categories
- **EPA (Environmental Protecting Agency)** –None of the ingredients listed.
- **TLV (Threshold Limit Value established by ACGIH)**- None of the ingredients is listed.
- **NIOSH (National Institute For Occupational Safety And Health)**-None of the ingredients is listed.

15.2 Chemical safety assessment:- A Chemical Safety Assessment has not been carried out.

Note: This MSDS has been prepared to meet WHMIS 2015 (Canada) requirements.

Section 16: Other Information

Disclaimer To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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