

Global Pioneer in NDT Consumables & Equipment



## **MATERIAL SAFETY DATA SHEET**

# **ZChek - DH Aerosol**

Prepared according to the Hazard Communication Standard (CFR 29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Prepared: Oct -22 Supersedes: 02

## **Section 1: Product and Company Identification**

1.1 Product Name: ZChek- DH-Aerosol

**1.2Product Use:** For Visible Liquid Penetrant Inspection.

1.3 Manufacturer Information: ZChemSpecialities Private Limited.

Sy. No.11/2/6, Puradapalya Village TavarekereHobli, 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









#### **Hazard pictograms**

Signal word: Danger

### 2.3 Hazard Statements

- H225 Highly Flammable liquid and vapor. Contains gas under pressure; may explode if heated
- H319Cause serious eye irritation.
- H336 May cause drowsiness or dizziness.
- Flammable Aerosol 1 H220
- Gases Under Pressure-Compressed Gas

### 2.4 Precautionary statements

- P210 Keep away from heat, sparks, open flames, hot surfaces. No smoking.
- P240+P241 Use explosion- proof electrical, ventilating, lighting, equipment.











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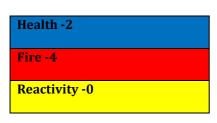


- P305+P351+P338 If in eyes- rinse cautiously with water for several minutes.
- P303+P361+P353 Wash skin thoroughly after handling.
- P233+P405 Keep container tightly closed.
- P261+P271 Avoid breathing product. Use in a well-ventilated area.

#### 2.5 Classification system

HMIS- ratings (scale0-4)

NFPA-ratings (scale0-4)







#### 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%
2- Propanol	67-63-0	50-60%
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











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- 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 materials 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.
- 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 expose to temperature exceeding 50 deg C/122 deg F.

## **Section 8: Exposure Controls and Personal Protection**

#### 8.1 Control Parameters

2- Propanol (67-63-0)		
ACGIH	ACGIH TWA (ppm)	200 ppm
ACGIH	ACGIH STEL (ppm) 400 ppm	
OSHA	OSHA PEL (TWA) mg/m <sup>3</sup> 980 mg/m <sup>3</sup>	
OSHA	OSHA PEL (TWA) (ppm) 400 ppm	
USA-IDLH	US IDLH (ppm) 2000 ppm(10% LEL	
USA –NIOSH	NIOSH REL (TWA) (mg/m3) 980 mg/m <sup>3</sup>	
USA -NIOSH	NIOSH REL (TWA) (ppm) 400 ppm	
USA- NIOSH	NIOSH REL (STEL) (mg/m <sup>3</sup> ) 1225 mg/m <sup>3</sup>	
ISA –NIOSH NIOSH REL (STEL) (ppm) 500 ppm		500 ppm











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LPG( 68476-86-8)		
OSHA	OSHA PEL TWA(ppm)	1000ppm

#### 8.2. Exposure Controls

**Engineering Controls:** Provide general and/or local exhaust ventilation to keep exposures below the exposure guidelines mentioned above.

**Personal protection**: Wear safety glasses to protect eyes. Wear nitrile rubber gloves if hand exposure is unavoidable. Respirator with filter if sprayed in enclosedunventilated space.







**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. White liquid, gas propellant.

Color: White

Odor: Characteristic

Odor threshold: Not determined pH value: Not applicable Melting point: Not determined Boiling point: Not determined

Flammability (solid, gaseous)- Not applicable

Flash point: -20deg.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: Not determined

Lower: Not determined Upper: Not determined

Vapour pressure at 20 deg.C: Not determined

Evaporation rate: Not determined

Solubility /miscibility with water: Not determined

Partition Coefficient: Not determined

Viscosity:

Dynamic- Not determined Viscosity- Not determined VOC Content: 626.07 g/l Vapor density: Not determined Evaporation rate: Not determined

### **Section 10: Stability and Reactivity**

Stability: Stable.

**Conditions to Avoid:** Keep away from heat and ignition sources.

**Incompatibility:** None











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**Hazardous Decomposition:** When burning, soot, oxides of carbon and nitrogen.

**Reactivity:** None

## **Section 11: Toxicological Information**

2-Propanol (67-63-0)		
LD 50 oral rat	5840 mg/kg	
LD 50 dermal rabbit	>12800 mg/kg	
LC inhalation rat	>10000 ppm/6h	

#### **Primary irritant effect**

- Skin: No irritant effect.
- Eye: Irritating effect
- Sensitization: No sensitizing effects known

### **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 probably, possible or confirmed human carcinogen.

NTP (National Toxicology Program) - None of the ingredients listed

OSHA-Ca (Occupational Safety and Health Administration)-None of the ingredients is listed

## **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.

## **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
- 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 vapors.











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## **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 CONSUMER COMMODITY	Class – Not applicable ORM-D
ORM-D	
ADR, IMDG,IATA	Class – Aerosols flammable, 2.1
	Flammable gas, 2.1
14.4 Packing group DOT ADR,IMDG,IATA	Packing group II
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 ingredient is listed.











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- Section 313 (Specific toxic chemical listings); 67-63-0 propan-2-ol
- Section 311/312 Fire hazard Acute health hazard
- TSCA (Toxic Substance Control Act):-All components listed
- **Proposition 65**
- Chemicals Known to cause cancer: None of the ingredients is listed
- **Carcinogenicity Categories**
- **EPA (Environmental Protecting Agency)** –None of the ingredients listed.
- NIOSH (National Institute for Occupational Safety and Health)-None of the ingredients is

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

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