SECTION	<b>: Identification of th</b>	e subsiance/mixiure a	ina oj ine company/u	inder taking
· 1.1 Product ide	entifier			
Trade name <u>E</u>	<u>coment Titanium CDG</u>			
1.2 Details of t	the supplier of the Materi	ial safety data sheet		
	/ <b>Supplier:</b> and technologies pvt ltd estate, Hinjewadei, Phase	II,	Tel.:	+91 996706059
1.4 Emergency	y telephone number:			
email: <u>warat@</u>	250784185/ +91 99670603 9 <u>effcoindia.com</u> effcoindia.com	596		
	2: Hazards identification of the substance or m			
GHS	S02 flame			
Flam. Liq. 3	S02 flame H226 Flammable liq	quid and vapour.		
Flam. Liq. 3	H226 Flammable liq	quid and vapour.		
Flam. Liq. 3	-	quid and vapour.		
Flam. Liq. 3	H226 Flammable liq			
Flam. Liq. 3 GHS Eye Dam. 1	H226 Flammable liq			
Flam. Liq. 3 Flam. Liq. 3 GHS Eye Dam. 1 GHS Aquatic Acute	H226 Flammable lig S05 corrosion H318 Causes seriou S09 environment 1 H400 Very toxic to a	s eye damage.	g effects.	
Flam. Liq. 3 Flam. Liq. 3 GHS Eye Dam. 1 GHS Aquatic Acute	H226 Flammable lig S05 corrosion H318 Causes seriou S09 environment 1 H400 Very toxic to a ic 1 H410 Very toxic to a	s eye damage. Iquatic life.	g effects.	
Flam. Liq. 3 Flam. Liq. 3 GHS Eye Dam. 1 GHS Aquatic Acute Aquatic Chron	H226 Flammable lig S05 corrosion H318 Causes seriou S09 environment 1 H400 Very toxic to a ic 1 H410 Very toxic to a	s eye damage. Iquatic life. quatic life with long lasting	g effects.	
Flam. Liq. 3 Flam. Liq. 3 GHS Eye Dam. 1 GHS Aquatic Acute Aquatic Chron GHS Skin Irrit. 2	H226 Flammable lig 505 corrosion H318 Causes seriou 509 environment 1 H400 Very toxic to a ic 1 H410 Very toxic to a 507 H315 Causes skin ir <b>according to Directive 67</b>	s eye damage. Iquatic life. quatic life with long lasting		
Flam. Liq. 3 Flam. Liq. 3 GHS Eye Dam. 1 Fye Dam. 1 GHS Aquatic Acute Aquatic Chron GHS Skin Irrit. 2 Classification GHS Xi; Irrital	H226 Flammable liq 505 corrosion H318 Causes seriou 509 environment 1 H400 Very toxic to a ic 1 H410 Very toxic to a 507 H315 Causes skin ir according to Directive 67 nt	s eye damage. Iquatic life. quatic life with long lasting ritation.	99/45/EC	
Flam. Liq. 3 Flam. Liq. 3 GHS Eye Dam. 1 GHS Aquatic Acute Aquatic Chron GHS Skin Irrit. 2 Classification GHS Xi; Irritan R41: Rise	H226 Flammable liq 505 corrosion H318 Causes seriou 509 environment 1 H400 Very toxic to a ic 1 H410 Very toxic to a 507 H315 Causes skin ir according to Directive 67 nt	s eye damage. Iquatic life. quatic life with long lasting ritation. 7/ <b>548/EEC or Directive 19</b> res.	99/45/EC	

	(Contd. of page 1)
· Hazard statements	5
H226 Flammable	liquid and vapour.
H315 Causes skin	irritation.
H318 Causes serie	bus eye damage.
H410 Very toxic to	aquatic life with long lasting effects.
· Precautionary stat	tements
P210	Keep away from heat/sparks/open flames/hot surfaces No smoking.
P303+P361+P355	3 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338	8 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a doctor.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

## **SECTION 3: Composition/information on ingredients**

· 3.2 Chemical characterisation: Mixtures

• Description: Mixture consisting of the following components with harmless additives.

Dangerous	components:
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CAS: 7440-66-6	zinc powder -zinc dust (stabilized)	50-<65%
CAS: 7429-90-5	aluminium powder	5.0-10.0%

(Contd. on page 3)

CAS: 64742-94-5	Solvent naphtha (petroleum), heavy arom.	1.0-2.09
CAS : 92045-53-9	Solvent Naptha Petroleum light arom	0.5- 1.0

## **SECTION 4: First aid measures**

## • 4.1 Description of first aid measures

General information Personal protection for the First Aider. Do not leave affected persons unsupervised. Take affected persons out of danger area and instruct to lie down.
After inhalation Supply fresh air; consult doctor in case of symptoms.

· After skin contact

Instantly wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.

(Contd. on page 4)

(Contd. of page 3)

· After eye contact

- *Rinse opened eye for several minutes under running water. Then consult doctor. Protect unharmed eye.*
- $\cdot \textit{After swallowing Rinse}$  out mouth and then drink plenty of water.

## **SECTION 5: Firefighting measures**

- 5.1 Extinguishing media
- · Suitable extinguishing agents Alcohol-resistant foam
- · For safety reasons unsuitable extinguishing agents Water with a full water jet.
- 5.2 Special hazards arising from the substance or mixture Can be released in case of fire Nitrogen oxides (NOx) Carbon monoxide (CO)

• 5.3 Advice for firefighters

• Protective equipment: Do not inhale explosion gases or combustion gases.

## **SECTION 6: Accidental release measures**

• 6.1 Personal precautions, protective equipment, and emergency procedures Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation Keep away from ignition sources Wear protective clothing.

#### · 6.2 Environmental precautions:

Do not allow product to reach sewage system or water bodies. Inform respective authorities in case product reaches water or sewage system.

• **6.3** *Methods and material for containment and cleaning up:* Absorb with liquid-binding material (sand, diatomite, sawdust). Ensure adequate ventilation. Do not flush with water or aqueous cleansing agents

## **SECTION 7: Handling and storage**

· 7.1 Precautions for safe handling

Keep containers tightly sealed.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

• Information about protection against explosions and fires: Keep ignition sources away - Do not smoke.

· 7.2 Conditions for safe storage, including any incompatibilities

· Storage

• Requirements to be met by storerooms and containers: No special requirements.

· Information about storage in one common storage facility: Not required.

(Contd. on page 5)

· Storage class	nation about storage conditions: Keep container tightly sealed.	(Contd. of pa
3		
SECTION 8	: Exposure controls/personal protection	
	. Exposure controls/personal protection	
· 8.1 Control par	rameters	
-	ith critical values that require monitoring at the workplace:	
	ninium powder (stabilized)	
TLV TWA	Long-term exposure $-8$ hrs 10.0 mg/m <sup>3</sup>	
7440-66-6 zinc	powder -zinc dust (stabilized)	
TWA (Inhalable)	10.0 mg/m <sup>3</sup> 5.0 mg/m <sup>3</sup> (long term Systematic)	
TWA (Respirable)	4 mg/m <sup>3</sup>	
64742-94-5 Sol	lvent naphtha (petroleum), heavy arom.	
TWA	$100 \text{ mg/m}^3$	
92045-53-9 Sol	lvent Naptha Petroleum light arom	
TWA	100 mg/ m <sup>3</sup>	

(Contd. of page 5)

• Additional information: The lists that were valid during the compilation were used as basis.

#### 8.2 Exposure controls

· Personal protective equipment

#### · General protective and hygienic measures

The usual precautionary measures should be adhered to in handling the chemicals. Instantly remove any soiled and impregnated garments. Wash hands during breaks and at the end of the work. Avoid contact with the eyes.

#### Breathing equipment:



Only during spraying without adequate removal by suction.

#### Protection of hands:



Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

To avoid skin problems, reduce the wearing of gloves to the required minimum. Avoid direct contact with the chemical/ the product.

#### · 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. Butyl rubber, BR

Fluorocarbon rubber (Viton)

(Contd. on page 7)

4	
Appearance: Form:	Fluid
Colour:	According to product specification
Smell:	Solvent like
PH-value:	Not applicable
Change in condition	
Melting point/Melting range:	Not determined
Boiling point/Boiling range:	120 °C
Flash point:	34 °C
Inflammability (solid, gaseous)	Not applicable.
Ignition temperature:	400 °C
Decomposition temperature:	Not determined
Danger of explosion:	Product is not explosive. However, formation of explosive steam/a mixtures is possible.
Critical values for explosion:	
Lower:	0.6 Vol %
Upper:	28.2 Vol %
Vapor pressure at 20 °C:	1.4 hPa
Density at 20 °C	$2.0 \ gm/cm^3$
Relative density	Not determined.
Vapour density	Not determined
Evaporation rate	Not determined.
Solubility in / Miscibility with Water:	Not miscible
	(Contd. on page

#### (Contd. of page 7)

## **SECTION 10: Stability and reactivity**

· 10.1 Reactivity

- · 10.2 Chemical stability
- · Conditions to be avoided: No decomposition if used according to specifications.
- $\cdot$  10.3 Possibility of hazardous reactions No dangerous reactions known
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: None

### **SECTION 11: Toxicological information**

· 11.1 Information on toxicological effects

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

7440-66-6 zinc powder -zinc dust (stabilized)

Oral	LD50	>2000 mg/kg (Muroidea)
Inhalative	LC50/4 h	5.41 mg/L (Muroidea)

64742-94-	5 Solvent r	aphtha (petroleum), heavy arom.
Oral	LD50	>5000 mg/kg
Dermal	LD50	>2000 mg/kg
92045-53-	9 Solvent I	Naptha Petroleum light arom
Oral	LD50	>2000 mg/kg
Dermal	LD50	>2000  mg/kg

#### TOXICOLOGICAL INFORMATION

No data is available for this preparation, which is classified according to the calculation method of EC Directives using information about the individual components.

**INHALATION** In high concentrations, vapors may irritate throat and respiratory system and cause coughing. Vapor may affect central nervous system and cause headache, discomfort, vomiting or intoxication.

**INGESTION** Ingestion may cause severe irritation of the mouth, the esophagus and the gastrointestinal tract. **SKIN CONTACT** Irritating to skin. Repeated exposure may cause skin dryness or cracking. Hydrolyses on contact with skin moisture forms solid polymeric titanium compounds which may be deposited on the surface.

EYE CONTACT Irritating and may cause redness and pain.

# **SECTION 12: Ecological information**

### · ECOTOXICITY

 $\cdot$  The product is not expected to be hazardous to the environment.

· BIOACCUMULATION

 $\cdot$  Neither the product or its hydrolysis products are expected to bioaccumulate.

· DEGRADABILITY

 $\cdot$  The product is degraded completely by hydrolysis.

# SECTION 13: Disposal considerations

·13.1 Waste treatment methods

· Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Hand over to disposers of hazardous waste.

(Contd. on page 10)

# Material Safety data sheet

(Contd. of page 9)

• **Recommendation:** Disposal must be made according to official regulations.

14.1 UN-Number	
ADR, IMDG, IATA	UN1263
14.2 UN proper shipping name	
ADR	PAINT, ENVIRONMENTALLY HAZARDOUS
IMDG	PAINT (zinc powder -zinc dust (stabilized), Solvent Naphtha), MARINE POLLUTANT
IATA	PAINT
14.3 Transport hazard class(es)	
ADR	
Class	3 (F1) Flammable liquids.
Label	3
IMDG	
Class	3 Flammable liquids.
Label	3
IATA	
Class	3 Flammable liquids.
Label	3
14.4 Packing group	
ADR, IMDG, IATA	III
14.5 Environmental hazards:	
Marine pollutant:	Product contains environmentally hazardous substances: zinc powder -zinc dust (stabilized) Yes Symbol (fish and tree)

(Contd. of page 10)

# Material Safety data sheet

• Special marking (ADR):

Symbol (fish and tree)

· 14.6 Special precautions for user

Warning: Flammable liquids.

· UN "Model Regulation": UN1263, PAINT, ENVIRONMENTALLY HAZARDOUS, 3, III

## **SECTION 15: Regulatory information**

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

- · National regulations
- Decree to be applied in case of technical fault: Critical quantity values according to the regulations on accidents should be adhered to.
- Water hazard class: Water hazard class 2 (Self-assessment): hazardous for water.
- · Other regulations, limitations and prohibitive regulations

· Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients is listed.

· REACH /Annex XIV

None of the ingredients is listed.

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## **SECTION 16: Other information**

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

#### · Relevant phrases

- H228 Flammable solid.
- H260 In contact with water releases flammable gases which may ignite spontaneously.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- *H411 Toxic to aquatic life with long lasting effects.*
- R10 Flammable.

(Contd. on page 12)

(Contd. of page 11)

## Material Safety data sheet

- *R15 Contact with water liberates extremely flammable gases.*
- R20 Harmful by inhalation.
- R36 Irritating to eyes.
- R36/37/38 Irritating to eyes, respiratory system and skin.
- *R37 Irritating to respiratory system.*
- R37/38 Irritating to respiratory system and skin.
- R41 Risk of serious damage to eyes.
- *R50/53* Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- *R51/53* Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- *R65 Harmful: may cause lung damage if swallowed.*
- *R66 Repeated exposure may cause skin dryness or cracking.*
- *R67 Vapours may cause drowsiness and dizziness.*