

**Safety Data Sheet**  
**Conforms to OSHA Hazard Communication Standard (HCS)**  
**29CFR 1910.1200**

Printing date 04/28/2014

Reviewed on 04/28/2014

## 1 Identification of the Substances/Preparation and of the Company/Undertaking

- **Product identifier**
- **Product name:** TYZOR® TEAZ
- **Relevant identified uses of the substance or mixture and uses advised against**  
Catalysts/Cross-linking agent./Adhesion promotors
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Dorf Ketal Specialty Catalysts LLC  
11200 Westheimer Road  
Suite 400  
Houston, Texas 77042  
Phone= +1 713 343 2377  
Fax= +1 832 649 7615  
Email: ehss@dorketal.com
- **Emergency telephone number:**  
For Chemical Emergency ONLY (spill, leak, fire, exposure or accident) call Chemtrec at +1 (703) 527 3887 or Chemtrec India at 000-800-100-7141. DORF KETAL Emergency Control Room +91 22-65271001.

## 2 Hazard(s) identification

- **Classification of the substance or mixture**  
The substance is not classified according to the Globally Harmonized System (GHS).
- **OSHA/HCS status**  
This material is considered non hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

- 
- **Label elements**
  - **GHS label elements** Not Applicable
  - **Hazard pictograms** Not Applicable
  - **Signal word** Not Applicable
  - **Hazard statements** Not Applicable
  - **Classification system:**
  - **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**

HEALTH	0	Health = 0
FIRE	1	Fire = 1
REACTIVITY	0	Reactivity = 0

- **Other hazards** No information available.

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### 3 Composition/information on ingredients

· **Chemical characterization: Substances**

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

### 4 First-aid measures

· **Description of first aid measures**

· **General information:** No special measures required.

· **Inhalation:** Remove source of irritation. If symptoms persist seek medical attention

· **Skin Contact:**

Immediately rinse with water.

If skin irritation continues, consult a doctor.

· **Eye Contact:**

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids.

Check for and remove any contact lenses.

Rinse opened eye for several minutes under running water. Then consult a doctor.

· **Ingestion:**

Rinse out mouth and then drink plenty of water.

Do not induce vomiting.

If symptoms occur seek medical attention.

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **Indication of any immediate medical attention and special treatment needed**

Show this safety data sheet to the doctor in attendance. Treat symptomatically.

### 5 Fire-fighting measures

· **Extinguishing media** In case of fire use the following suitable extinguishing agent.

· **Suitable extinguishing agents:**

CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Use fire fighting measures that suit the environment.

· **Special hazards arising from the substance or mixture** No further relevant information available.

· **Advice for firefighters**

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

· **Protective equipment:**

Wear fully protective suit.

Wear self-contained respiratory protective device.

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## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**

Use respiratory protective device against the effects of fumes/dust/aerosol.

Wear protective clothing.

Wear protective equipment. Keep unprotected persons away.

Keep away from ignition sources

Ensure adequate ventilation

- **Environmental precautions:**

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

- **Methods and material for containment and cleaning up:**

Stop leak if without risk.

Move containers from spill area.

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

## 7 Handling and storage

- **Precautions for safe handling**

Put on appropriate personal protective equipment .

Do not ingest.

Avoid contact with eyes, skin and clothing.

Avoid breathing vapour or mist.

Ensure good ventilation/exhaustion at the workplace.

- **Information about protection against explosions and fires:**

Protect from heat.

Protect against electrostatic charges.

- **Conditions for safe storage, including any incompatibilities**

- **Requirements to be met by storerooms and receptacles:**

Avoid storage near extreme heat, ignition sources or open flame.

- **Information about storage in one common storage facility:** Store away from oxidizing agents.

- **Further information about storage conditions:** Moisture-sensitive material. Once opened, container should be kept under nitrogen blanketing to prevent decomposition.

**Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

No exposure limit value known.

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- **Exposure controls**

- **Appropriate engineering controls:**

Use local exhaust ventilation or other engineering control to maintain airborne levels below exposure limit requirement or guidelines.

Local exhaust ventilation may be necessary for some operations.

If there are no applicable exposure limit requirement or guidelines, general ventilation should be sufficient for most operations.

- **Personal protective equipment:**

- **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Do not inhale gases / fumes / aerosols.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- **Breathing equipment:**

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

- **Protection of hands:**

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

- **Material of gloves**

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

- **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 observed.

- **Eye protection:** Goggles recommended during refilling.

- **Body protection:** Protective work clothing

## 9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

**Form:** Viscous liquid

**Color:** Yellowish brown

- **Odor:** Characteristic

- **Odour threshold:** No data available.

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· <b>pH-value:</b>	10 (Conc. (% w/w): 1%)
· <b>Melting point/Freezing Point :</b>	No data available
· <b>Boiling point/Boiling range:</b>	No data available
· <b>Flash point:</b>	100-136 °C (212-277 °F) (Closed cup)
· <b>Flammability (solid, gaseous):</b>	Not applicable.
· <b>Decomposition temperature:</b>	No data available.
· <b>Auto ignition temperature</b>	No data available
· <b>Explosion limits:</b>	
<b>Lower:</b>	No data available.
<b>Upper:</b>	No data available
· <b>Oxidizing properties</b>	No data available.
· <b>Vapor pressure at 20 °C (68 °F):</b>	<0.1 kPa
· <b>Relative density at 20 °C (68 °F)</b>	1.34 g/cm <sup>3</sup> (11.182 lbs/gal)
· <b>Vapour density</b>	No data available
· <b>Evaporation rate</b>	No data available
· <b>Solubility:</b>	Soluble in water.
· <b>Partition coefficient (n-octanol/water):</b>	No data available
· <b>Viscosity:</b>	
<b>Dynamic at 20 °C (68 °F):</b>	50000 mPas
<b>Kinematic:</b>	No data available.

## 10 Stability and reactivity

- **Reactivity** Under normal conditions of storage and use, hazardous reactions will not occur.
- **Chemical stability** The product is stable under storage at normal ambient temperature.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:**  
Reactive or incompatible with the following materials:  
Oxidizing material
- **Hazardous decomposition products:**  
Under normal conditions of storage and use, hazardous decomposition products should not be produced

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## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:** No relevant information available.
- **Primary irritant effect:**
- **on the skin:** No irritating effect.
- **on the eye:** No irritating effect.
- **Respiratory/ Skin sensitization:** No sensitizing effects known.
- **Germ cell mutagenicity:** No data available
- **Carcinogenicity:** No data available
- **Reproductive toxicity:** No data available

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

Substance is not listed.

- **NTP (National Toxicology Program)**

Substance is not listed.

- **Single dose toxicity:** No data available
- **Repeated Dose toxicity:** No data available
- **Aspiration hazard:** Product is not classified for aspiration hazard.
- **Other relevant information:** No data available

## 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability:** No further relevant information available.
- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.
- **Results of PBT and vPvB assessment:** Not available
- **Other adverse effects:** No further relevant information available.

## 13 Disposal Information

- **Waste treatment methods**

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by products should at all times comply with the requirements of environmental protection and waste disposal

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legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

- **Recommendation:**

Smaller quantities can be disposed of with household waste.

Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

- **Uncleaned packagings:**

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

## 14 Transport information

- **UN-Number**

- **DOT, ADR, ADN, IMDG, IATA** Not Applicable

- **UN proper shipping name**

- **DOT, ADR, ADN, IMDG, IATA** Not Applicable

- **Transport hazard class(es)**

- **DOT, ADR, ADN, IMDG, IATA**

- **Class** Not Applicable

- **Packing group**

- **DOT, ADR, IMDG, IATA** Not Applicable

- **Environmental hazards:**

- **Marine pollutant:** No

- **Special precautions for user**

Not applicable.

- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

## 15 Regulatory information

- **Section 355 (extremely hazardous substances):**

Substance is not listed.

- **Section 313 (Specific toxic chemical listings):**

Substance is not listed.

- **TSCA (Toxic Substances Control Act):**

Substance is listed.

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· **Proposition 65**· **Chemicals known to cause cancer:**

Substance is not listed.

· **Chemicals known to cause reproductive toxicity for females:**

Substance is not listed.

· **Chemicals known to cause reproductive toxicity for males:**

Substance is not listed.

· **Chemicals known to cause developmental toxicity:**

Substance is not listed.

· **Carcinogenic categories**· **EPA (Environmental Protection Agency)**

Substance is not listed.

· **TLV (Threshold Limit Value established by ACGIH)**

Substance is not listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

Substance is not listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

Substance is not listed.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**16 Other information**

File name: TYZOR TEAZ SDS US en APR-28-2014

Version: 2

Superseded SDS date: 2/27/2012

Change History: SDS format updated.

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

APF = Assigned protection factor

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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IOELV: Indicative Occupational Exposure Limit Values

**Disclaimer:**

The data and recommendations presented in this data sheet concerning the use of our product and the materials contain there in are believed to be accurate and are based on information which is considered reliable as of the date hereof. However, the customer should determine the suitability of much material for his purpose before adopting them on a commercial scale. Since the use our product by others is beyond our control, no guarantee, express or implied, is made and no responsibility assumed for the use of this material or the results to be obtained there from. Information on this document is furnished for the purpose of compliance with Government Health and Safety Regulations and shall not be used for any other purposes. Moreover, the recommendations contained in this Safety Data Sheet are not to be constructed as a license to operate under, or a recommendation to infringe, any existing patents, nor should they be confused with state, municipal or insurance requirements, or with national safety codes.