

Safety Data Sheet
acc. to OSHA HCS

Printing Date 09/26/2017

Revision Number 3

Revision Date 09/26/2017

1 Identification

- **Product identifier**
- **Trade name:** 13554 (DC13554 HYDRA-FASTEN ADHESIVES) ALSO KNOWN AS TITAN DX
- **Article number:** 13554
- **Relevant identified uses of the substance or mixture.** Adhesive
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Royal Adhesives And Sealants, LLC
2001 W. Washington Street
South Bend IN 46628-2023
Information Phone Number: 574-246-5000
- **Information department:** Environment protection department.
- **Emergency telephone number:**
ChemTrec: Day or Night within USA and Canada: 1-800-424-9300.
Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

2 Hazard(s) identification

- **Classification of the substance or mixture**
The product does not meet the criteria for classification as hazardous under the GHS and 29 CFR 1910.1200

- **Label elements**
- **GHS label elements** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**
- | | | |
|-----------------|---|---------------------|
| HEALTH | 1 | Health = 1 |
| FIRE | 1 | Fire = 1 |
| PHYSICAL HAZARD | 0 | Physical Hazard = 0 |

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Mixture

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· Hazardous components:

64742-49-0	Naphtha (petroleum), hydrotreated light	2.5-10%
1314-13-2	zinc oxide	≤1.0%

* 4 First-aid measures

· Description of first aid measures

· After inhalation:

Supply fresh air or oxygen; call for doctor.

In case of unconsciousness place patient stably in side position for transportation.

· After skin contact: Immediately wash with water and soap and rinse thoroughly.

· After eye contact:

Rinse opened eye for 20 minutes under running water. If eye becomes irritated, obtain medical treatment.

· After swallowing: Seek immediate medical advice.

· Information for doctor:

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

· Indication of any immediate medical attention and special treatment needed

No further relevant information available.

* 5 Fire-fighting measures

· Extinguishing media

· Suitable extinguishing agents:

CO₂, 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

Firefighters use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

· Protective equipment: Protective clothing and respiratory protective device.

* 6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Wear protective equipment. Keep unprotected persons away.

· Environmental precautions: Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

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

Dispose of contaminated material as waste in accordance with federal state and local regulations.

Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

· PAC-I:		
1314-13-2	zinc oxide	10 mg/m ³
1336-21-6	ammonia	61 ppm

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· PAC-2:		
1314-13-2	zinc oxide	15 mg/m ³
1336-21-6	ammonia	330 ppm
· PAC-3:		
1314-13-2	zinc oxide	2,500 mg/m ³
1336-21-6	ammonia	2,300 ppm

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
*Open and handle receptacle with care.
 Avoid contact with skin and eyes.
 Ensure good ventilation/exhaustion at the workplace.
 Prevent formation of aerosols.*
- **Information about protection against explosions and fires:** *Keep container closed when not in use.*
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** *Store in a cool location away from direct heat.*
- **Information about storage in one common storage facility:**
*Store away from oxidizing agents.
 Do not store together with acids.*
- **Further information about storage conditions:** *Keep receptacle tightly sealed.*
- **Specific end use(s)** *No further relevant information available.*

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** *No further data; see item 7.*
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
*The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.
 At this time, the remaining constituent has no known exposure limits.*

1314-13-2 zinc oxide

PEL	Long-term value: 15* 5** mg/m ³ *total dust **respirable fraction and fume
REL	Short-term value: 10** mg/m ³ Long-term value: 5 mg/m ³ Ceiling limit value: 15* mg/m ³ *dust only **fume
TLV	Short-term value: 10* mg/m ³ Long-term value: 2* mg/m ³ *as respirable fraction

- **Additional information:** *The lists that were valid during the creation were used as basis.*
- **Exposure controls**
- **Personal protective equipment (see listings below)**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.

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Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

· Breathing equipment:

Use approved respiratory protection equipment when airborne exposure is excessive. Consult the respirator manufacturer to determine the appropriate type of equipment for a given application. Observe respirator use limitations specified by the manufacturer.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· Material of gloves

Nitrile rubber, NBR

Chloroprene rubber, CR

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.

· 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:

Safety glasses with side shields.



Tightly sealed goggles

· Body protection: Protective work clothing

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Liquid
Color:	Off White
Odor:	Characteristic

· Change in condition

Melting point:	Undetermined.
Boiling point:	100 °C (212 °F)

· Flash point: Does not exhibit sustained combustibility.

· Auto igniting: Product is not selfigniting.

· Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· Flammable limits:

Lower:	Not Available
Upper:	Not Available

· Specific gravity: 1.03

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· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined
· Solubility in / Miscibility with Water:	Dispersible.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	3.3 %
Solids content:	50.0 %
· Other information	VOC: = .29 lb/gal OR 34 GRAMS/L 66 G/L (SCAQMD RULE 1168 METHOD) Weight per gallon: = 8.61

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** Avoid high temperatures. Avoid freezing.
- **Incompatible materials:**
 - Reacts with oxidizing agents.
 - Reacts with acids.
 - Reacts with salts
- **Hazardous decomposition products:**
 - Carbon monoxide and carbon dioxide
 - Hydrogen chloride (HCl)
 - Hydrocarbons

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
 - **on the skin:** May irritate the skin.
 - **on the eye:** May irritate the eye.
- **Sensitization:** Prolonged or repeated contact may cause sensitization to the skin and lungs.
- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:
- **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.

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

None of the ingredients is listed.

* 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** At present there are no ecotoxicological assessments.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

* 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:** Must be specially treated adhering to official regulations.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

* 14 Transport information

- | | |
|--|--|
| · UN-Number | |
| · DOT, ADN, IMDG, IATA | not regulated |
| · UN proper shipping name | |
| · DOT, ADN, IMDG, IATA | not regulated |
| · Transport hazard class(es) | |
| · DOT, ADN, IMDG, IATA | |
| · Class | not regulated |
| · Packing group | |
| · DOT, IMDG, IATA | not regulated |
| · Environmental hazards: | Not applicable. |
| · Special precautions for user | Not applicable. |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · Transport/Additional information: | DOT, ADR, IMDG, IATA - Not regulated in transport.
Not dangerous according to the above specifications. |

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- | | |
|---------------------------------|---------------|
| · IMDG | |
| · Remarks: | Non regulated |
| · UN "Model Regulation": | not regulated |

* 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

· Section 355 (extremely hazardous substances):
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None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):
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1314-13-2	zinc oxide
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1336-21-6	ammonia
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· TSCA (Toxic Substances Control Act):

All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.
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· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:
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None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:
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None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· (DSL) Canada Domestic Substance List

All components of this product are on the DSL(Canada Domestic Substance list) or are exempt from DSL requirements.
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· New Jersey Right-to-Know List:

1314-13-2	zinc oxide
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1336-21-6	ammonia
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· New Jersey Special Hazardous Substance List:

1336-21-6	ammonia	CO
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· Pennsylvania Right-to-Know List:

1314-13-2	zinc oxide
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1336-21-6	ammonia
-----------	---------

· Pennsylvania Special Hazardous Substance List:

1314-13-2	zinc oxide	E
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1336-21-6	ammonia	E
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· Cancerogenity categories

· EPA (Environmental Protection Agency)
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1314-13-2	zinc oxide	D, I, II
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· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients listed.

· **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

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

None of the ingredients is listed.

· **National regulations:**

- **Water hazard class:** Water hazard class 3 (Self-assessment): extremely hazardous for water.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

* 16 Other information

Although the information and recommendations set forth in this SDS are presented in good faith and are believed to be correct as of the date of this SDS, Royal Adhesives & Sealants and JWW Services, Inc. make no representations as to the completeness or accuracy thereof. Information is supplied on the condition that the persons receiving and using it will make their own determination as to the suitability for their purpose prior to use. In no event will Royal Adhesives & Sealants, JWW Services, Inc. or any affiliate thereof be responsible for damages of any nature whatsoever resulting from the use or reliance on the information set forth in the SDS.

· **Department issuing SDS:** Environment protection department.

· **Creation Date:** 09/26/2017

· **Date of preparation / last revision** 09/26/2017 / 2

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit