Dynasylan® F 8263

5.0 / US Version Material no. Revision date 05/29/2015 Specification 116754 Print Date 06/25/2015 Order Number Page 1/13



1. Identification

1.1. **Product identifier**

Trade name Dynasylan® F 8263

1.2. Recommended use of the chemical and restrictions on use

Relevant applications identified For industrial use

Function Hydro- and oleophobizing agent

Surface modifier

1.3. Details of the supplier of the safety data sheet

Company Evonik Corporation USA

299 Jefferson Road

Parsippany, NJ 07054-0677

USA

Telephone 973-929-8000

Telefax 973-929-8040

Email address Product-Regulatory-Services@Evonik.com

1.4. 24 HOUR EMERGENCY TELEPHONE NUMBERS:

CHEMTREC - US &

CANADA:

800-424-9300

CHEMTREC MEXICO: 01-800-681-9531

CHEMTREC

INTERNATIONAL:

+1 703-527-3887 (collect calls accepted)

Product Regulatory

973-929-8060

Services

Hazards identification 2.

2.1. Classification of the substance or mixture

Classification according to Regulation 29CFR 1910.1200

Flammable liquids H225 Category 2 Eye irritation Category 2A H319 Specific target organ toxicity - single exposure (Central H336 Category 3

nervous system)

2.2. Label elements

Statutory basis Classification according to Regulation 29CFR 1910.1200

Symbol(s)

Dynasylan® F 8263





Signal word Danger

Hazard statement H225 - Highly flammable liquid and vapour.

H319 - Causes serious eye irritation. H336 - May cause drowsiness or dizziness.

Precautionary statement:

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking. **Prevention**

P233 - Keep container tightly closed.

P240 - Ground/bond container and receiving equipment.

P241 - Use explosion-proof electrical/ventilating/lighting/equipment.

P242 - Use only non-sparking tools.

P243 - Take precautionary measures against static discharge. P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 - Wash skin thoroughly after handling.

P271 - Use only outdoors or in a well-ventilated area.

P280 - Wear protective gloves/ eye protection/ face protection.

Precautionary statement:

Reaction

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated

clothing. Rinse skin with water/shower.

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. P312 - Call a POISON CENTER or doctor/physician if you feel unwell. P337 + P313 - If eye irritation persists: Get medical advice/ attention.

P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam

for extinction.

Precautionary statement:

Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.

P403 + P235 - Store in a well-ventilated place. Keep cool.

Ø 95%

P405 - Store locked up.

Precautionary statement:

Dispos al

P501 - Dispose of contents/ container to an approved waste disposal plant.

Supplemental hazard information / Label elements

2.3. Other hazards

None known

3. Composition/information on ingredients

Chemical nature

Silane preparation

• Propan-2-ol

CAS-No. 67-63-0 Flammable liquids Category 2 Category 2A Eye irritation Specific target organ toxicity - single exposure (Central nervous system) Category 3

• Triethoxy(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)silane Ø 4%

CAS-No. 51851-37-7

Remarks Not a hazardous substance or mixture.

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Other information

This material is classified as hazardous under OSHA regulations.

This product contains a component that is subject to a TSCA Significant New Use Rule (SNUR). This product may be used in anti-graffiti coatings, industrial and commercial applications with proper personal protection equipment. The product may not be used in consumer products. These limitations are cited in the US Code of Federal Regulations 40 CFR 721.9504. If a product containing the regulated component is distributed further, it is required that the distributor ensure that these limitations are communicated to downstream users.

4. First aid measures

4.1. Description of first aid measures

General advice

Remove contaminated or saturated clothing immediately and dispose of safely.

Inhalation

If aerosol or mists are inhaled, take affected persons out into the fresh air. Possible discomforts include severe irritation of mucus lining (nose, throat, eyes), cough, sneezing and flow of tears. In case of persistent discomfort, obtain medical attention immediately.

Skin contact

Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Obtain medical attention immediately if symptoms occur. Wash clothing before reuse.

Eve contact

In case of contact, immediately flush eyes with plenty of water, or if necessary, with eye rinsing solution. In case of persistent discomfort, consult an ophthalmologist.

Ingestion

If accidentally swallowed, rinse mouth thoroughly with water and afterwards, drink plenty of water. In case of discomfort, obtain medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptom s

None known

4.3. Indication of any immediate medical attention and special treatment needed

If required, therapy of irritative effect.

After absorbing large amounts of substance:

administration of activated charcoal.

Acceleration of gastrointestinal passage

5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Flammable liquid. Vapors can travel to a source of ignition and flash back. Explosive mixtures may occur at temperatures at or above the flashpoint.

5.3. Advice for firefighters

Containers can build up pressure if exposed to heat (fire). Cool with water spray. As in any fire, wear self-contained, pressure-demand breathing apparatus (MSHA-NIOSH approved or equivalent) and full protective gear.

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6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment.

6.2. Environmental precautions

Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.

6.3. Methods and material for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

Additional advice

Remove sources of ignition and ventilate area.

Run off may create fire or explosion hazard in sewer.

Assure sufficient ventilation.

7. Handling and storage

7.1. Precautions for safe handling

Wear personal protective equipment; see section 8. Avoid contact with eyes, skin and clothing. Use with adequate ventilation. Avoid breathing vapor or mist. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Wash thoroughly after handling. Keep away from heat, sparks, flames and other sources of ignition. Keep container tightly closed. Use only with adequate ventilation.

Vapors may spread long distances and travel to areas away from the work site before igniting or flashing back to the vapor source.

7.2. Conditions for safe storage, including any incompatibilities

Advice on protection against fire and explosion

Take precautionary measures against static charges, keep away from sources of ignition.

Explosion protection equipment required.

Danger of explosion from residual product fumes; therefore avoid spark production through cutting, grinding, or welding work in the area of the container.

When repairs of the production system are to be made (e.g. welding work), the section to be repaired must be essentially free of product.

This material may have a low electrical conductivity and therefore may accumulate dangerous levels of static electricity. An ignitable vapor-air mixture can form inside storage tanks.

The user must be sure to dissipate static charge by careful bonding and grounding of all equipment and personnel involved in fluid transfer with continuity checks to prove effectiveness. Additional precautions against fire and explosion are the use of inert gas to purge vapor space; dip-pipes while filling vessels, especially lined vessels; grounded tank level floats; reduced flow velocity; self-closing valves on transfer lines and flame arrestors in vent lines.

Additional guidance on fire and explosion protection may be found in various consensus standards, including NFPA 30, 69 and 77 and API 2003 as well as OSHA regulation 29CFR1910.106.

Follow all MSDS/label precautions even after container is emptied because it may retain product residues.

Storage

Keep containers tightly closed in a cool, well-ventilated place. Protect from moisture.

Residual vapors might explode on ignition; do not apply heat, cut, drill, grind or weld on or near this container.

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8. Exposure controls/personal protection

8.1. Control parameters

	Common parameters		
Propan-2-ol			
CAS-No. Control parameters	67-63-0 400 ppm 980 mg/m3	Permissible exposure limit:(OSHAZ1)	
Control parameters	400 ppm 980 mg/m3	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):(US CA OEL)	
Control parameters	500 ppm 1225 mg/m3	Short Term Exposure Limit (STEL):(US CA OEL)	
Control parameters	200 ppm	Time Weighted Average (TWA):(ACGIH)	
Control parameters	400 ppm	Short Term Exposure Limit (STEL):(ACGIH)	
Control parameters	400 ppm 980 mg/m3	Time Weighted Average (TWA):(TN OEL)	
Control parameters	500 ppm 1225 mg/m3	Short Term Exposure Limit (STEL):(TN OEL)	

8.2. Exposure controls

Engineering measures

Use this product preferably in a closed system, or use process enclosures, local exhaust ventilation or other engineering controls to minimize airborne exposure.

Personal protective equipment

Respiratory protection

A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use. NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.

Hand protection

Glove material for example, butyl-rubber

Material thickness 0.5 mm

Break through time >= 480 min

Glove material for example, Fluorinated rubber (Viton)

Material thickness 0.4 mm

Break through time >= 480 min

The above mentioned hand protection is based on knowledge of the chemistry and anticipated uses of this product but it may not be appropriate for all workplaces. A hazard assessment should be conducted prior to use to ensure suitability of gloves for specific work environments and processes prior to use. Use impermeable gloves.

Selection of protective gloves to meet the requirements of specific workplaces.

Suitability for specific workplaces should be clarified with protective glove manufacturers.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Eye protection

Use chemical splash goggles or face shield.

Skin and body protection

Flame retardant antistatic protective clothing.

(Solvent-resistant)

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A safety shower and eye wash fountain should be readily available.

To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.132) be conducted before using this product.

Hygiene measures

Avoid contact with skin, eyes and clothing. Do not inhale vapors or aerosols. Do not eat, drink, or smoke when using the product. Remove contaminated or saturated clothing.

Wash contaminated clothing before re-use.

Protective measures

Handle in accordance with good industrial hygiene and safety practice.

Avoid contact with skin, eyes and clothing.

If there is the possibility of skin/eye contact, the indicated hand/eye/body protection should be used.

Use protective clothing / face shield if necessary.

Do not breathe in vapours or aerosols.

If workplace exposure limits are exceeded and/or larger amounts are released (leakage, spilling, dust) the indicated respiratory protection should be used.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

physical state liquid
Colour colourless
Form liquid
Odour alcoholic

Odour Threshold not determined

pH < 2.01 (500 g/l) (0 °C)

Boiling point/range 82 °C (1013 hPa)

Method: DIN 51 356

2-propanol

Flash point < 21 °C

Method: DIN EN ISO 13736

Evaporation rate not determined

Lower explosion limit 2 %(V)

2-propanol

Upper explosion limit 12 %(V)

2-propanol

Vapour pressure 42 hPa (20 °C)

2-propanol

Density 0.8 g/cm3 (20 °C)

Method: DIN 51757

Water solubility miscible

Partition coefficient: n- not determined

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octanol/water

Autoignition temperature 425 °C

Method: DIN 51 794

Thermal decomposition Distills without decomposition at atmospheric pressure.

Viscosity, dynamic 2 mPa.s (20 °C)

Method: DIN 53 015

9.2. Other information

no data available

10. Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous Reacts violently with: strong oxidants.

reactions

10.4. Conditions to avoid

Keep away from heat and sources of ignition.

Formation of flammable or explosive vapour/air mixtures possible.

10.5. Incompatible materials

strong oxidant

10.6. Hazardous decomposition products

None known.

11. Toxicological information

11.1. Information on toxicological effects

Method: Calculation method

Acute inhalation toxicity Test substance: 2-propanol

Vapours may cause drowsiness and dizziness.

Skin irritation Test substance: 2-propanol

May be irritating on frequent or long-term contact.

Eye irritation Irritant

12. Ecological information

12.1. Toxicity

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12.2. Persistence and degradability

Biodegradability No data available

12.3. Bioaccumulative potential

Bioaccumulation No data available

12.4. Mobility in soil

Mobility No data available

12.5. Other adverse effects

Further Information No ecotoxicological studies are available.

13. Disposal considerations

13.1. Waste treatment methods

Product

Waste must be disposed of in accordance with federal, state and local regulations. Incineration is the preferred method. Empty containers must be handled with care due to product residue. DO NOT HEAT OR CUT THE EMPTY CONTAINER WITH ELECTRIC OR GAS TORCH.

Uncleaned packaging

Do not reuse empty containers and dispose of in accordance with the regulations issued by the appropriate local authorities.

If there is product residue in the emptied container, follow directions for handling on the container's label.

Incorrect disposal or reuse of this container is illegal and can be dangerous.

Other countries: observe the national regulations.

14. Transport information

D.O.T. Road/Rail

14.1. UN number: UN 1219

14.2. UN proper shipping name: Isopropanol, solution

14.3. Transport hazard class(es):14.4. Packing group:

14.5. Environmental hazards (Marine ---

pollutant):

14.6. Special precautions for user: No

Air transport ICAO-TI/IATA-DGR

14.1. UN number: UN 1219

14.2. UN proper shipping name: Isopropanol, solution

14.3. Trans port hazard class(es):
14.4. Packing group:
14.5. Environmental hazards:
14.6. Special precautions for user:
Yes

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IATA-C: ERG-Code 3L IATA-P: ERG-Code 3L

Sea transport IMDG-Code/GGVSee (Germany)

14.1. UN number:

14.2. UN proper shipping name: ISOPROPANOL (ISOPROPYL ALCOHOL), SOLUTION

14.3. Transport hazard class(es): 3 14.4. Packing group: Ш 14.5. Environmental hazards (Marine pollutant):

14.6. Special precautions for user:

No EmS: F-E,S-D

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:

for transportapproval see regulatory information

15. Regulatory information

US Federal Regulations

OSHA

If listed below, chemical specific standards apply to the product or components:

None listed

Clean Air Act Section (112)

If listed below, components present at or above the de minimus level are hazardous air pollutants:

None listed

CERCLA Reportable Quantities

If listed below, a reportable quantity (RQ) applies to the product based on the percent of the named component:

None listed

SARA Title III Section 311/312 Hazard Categories

The product meets the criteria only for the listed hazard classes:

- Acute Health Hazard
- Fire Hazard

SARA Title III Section 313 Reportable Substances

If listed below, components are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

Propan-2-ol

CAS-No. 67-63-0

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Toxic Substances Control Act (TSCA)

If listed below, non-proprietary substances are subject to export notification under Section 12 (b) of TSCA:

Triethoxy(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)silane
 CAS-No. 51851-37-7 One-Time Export Notification only.

State Regulations

The Listing requirements of the Right to Know (RTK) legislation varies by state. All information for NJ, PA, MA and other states can be derived from the listing of hazardous and non-hazardous components in section 2 and 15 of this MSDS.

California Proposition 65

A warning under the California Drinking Water Act is required only if listed below:

None listed

An employer using HMIS/NFPA labeling must through training ensure that its employees are fully aware of the hazards of the chemicals used.

HMIS Ratings

Health: 2 Flammability: 3 Physical Hazard: 0

NFPA Ratings

Health: 2 Flammability: 3 Reactivity: 0

16. Other information

Further information

Revision date 05/29/2015

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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Legend

ACC American Chemistry Council

ACGIH American Conference of Governmental Industrial Hygenists

ACS Advisory Committee on Sustainability

ADI Acceptable Daily Intake

ASTM American Society for Testing and Materials

ATP Adaptation to Technical Progress

BCF Bioconcentration factor
BOD Biochemical oxygen demand

c.c. closed cup

CAO Cargo Aircraft Only

Carcinogen

CAS Chemical Abstract Services

CDN Canada

CEPA Canadian Environmental Protection Act

CERCLA Comprehensive Environmental Response – Compensation and Liability Act

CFR Code of Federal Regulations

CMR carcinogenic-mutagenic-toxic for reproduction

COD Chemical oxygen demand

DIN German Institute for Standardization
DM EL Derived minimum effect level
DNEL Derived no effect level
DOT Department of Transportation
EC50 half maximal effective concentration
EPA Environmental Protection Agency
ErC50 Reduction of Growth Rate

ERG Emergency Response Guide Book FDA Food and Drug Administration

GHS Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

GLP Good Laboratory Practice
GMO Genetic Modified Organism
HCS Hazard Communication Standard

HMIS Hazardous Materials Identification System
IARC International Agency for Research on Cancer
IATA International Air Transport Association

IBC Intermediate Bulk Container

ICAO-TI International Civil Aviation Organization- Technical Instructions

ICCA International Council of Chemical Association

ID Identification number

IMDG International Maritime Dangerous Goods

IUPAC International Union of Pure and Applied Chemistry
ISO International Organization For Standardization

LC50 50 % Lethal Concentration

LD50 50 % Lethal Dose **L(E)C50** LC50 or EC50

LOAEL Low est observed adverse effect level

LOEL Low est observed effect level

MARPOL International Convention for the Prevention of Pollution from Ships

NFPA National Fire Protection Association
NOAEL No observed adverse effect level
NOEC no observed effect concentration

NOEL no observed effect level

o. c. open cup

OECD Organisation for Economic Cooperation and Development

OEL Occupational Exposure Limit

OSHA Occupational Safety and Health Administration

PBT Persistent, bioaccumulative, toxic
PEC Predicted effect concentration
PNEC Predicted no effect concentration

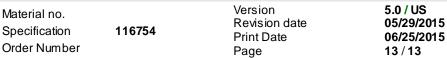
RQ Reportable Quantity SDS Safety Data Sheet

STOT Specific Target Organ Toxicity

UN United Nations

vPvB very persistent, very bioaccumulative

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voc

volatile organic compounds Workplace Hazardous Materials Information System WHMIS

WHO World Health Organization