

Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: April 20, 2018

Revision: April 20, 2018

1 Identification

- **Product identifier**
- **Trade name:** DT-420
- **Other means of identification:** No other identifiers
- **Recommended use and restriction on use**
- **Recommended use:** Coating material
- **Restrictions on use:** No relevant information available.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
Dyna-Tek LLC.
5300 E. 59th Street
Kansas City, MO 64130
USA
(816) 444-6266
- **Emergency telephone number:**
ChemTel Inc.
(800)255-3924 (North America)
+1 (813)248-0585 (International)

2 Hazard(s) identification

- **Classification of the substance or mixture**
Flam. Liq. 2 H225 Highly flammable liquid and vapor.
Acute Tox. 4 H302 Harmful if swallowed.
Skin Irrit. 2 H315 Causes skin irritation.
Eye Dam. 1 H318 Causes serious eye damage.
Skin Sens. 1 H317 May cause an allergic skin reaction.
STOT SE 3 H336 May cause drowsiness or dizziness.
Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms:**



GHS02 GHS05 GHS07 GHS08

- **Signal word:** Danger
- **Hazard statements:**
H225 Highly flammable liquid and vapor.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.
H336 May cause drowsiness or dizziness.
H304 May be fatal if swallowed and enters airways.

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Precautionary statements:

- P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- 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/vapors/spray
- P264 Wash thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing must not be allowed out of the workplace.
- P280 Wear protective gloves/protective clothing/eye protection.
- P301+P310 If swallowed: Immediately call a poison center/doctor.
- P330 Rinse mouth.
- P331 Do NOT induce vomiting.
- P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P304+P340 IF INHALED: Remove person to fresh air and keep 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.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P363 Wash contaminated clothing before reuse.
- P370+P378 In case of fire: Use foam, powder, or carbon dioxide for extinction.
- P403+P235 Store in a well-ventilated place. Keep cool.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

Chemical characterization: Mixtures
Components:

64741-66-8	Naphtha (petroleum), light alkylate  Asp. Tox. 1, H304	40-60%
108-21-4	isopropyl acetate  Flam. Liq. 2, H225  Eye Irrit. 2A, H319; STOT SE 3, H336	20-30%
475645-84-2	Organic Polysilazane Compound  Flam. Liq. 2, H225  Skin Corr. 1B, H314; Eye Dam. 1, H318  Acute Tox. 4, H302	10-20%
64742-47-8	Distillates (petroleum), hydrotreated light  Flam. Liq. 3, H226  Asp. Tox. 1, H304  Skin Irrit. 2, H315; STOT SE 3, H336	<10%

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919-30-2 3-aminopropyltriethoxysilane

<1%

	Skin Corr. 1B, H314
	Acute Tox. 4, H302; Skin Sens. 1, H317

Additional information:

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.
 For the wording of the listed Hazard Statements, refer to section 16.

4 First-aid measures

Description of first aid measures
After inhalation:

Supply fresh air.
 Provide oxygen treatment if affected person has difficulty breathing.
 Seek medical help for symptoms or if unconscious.
 In case of unconsciousness place patient stably in side position for transportation.

After skin contact:

Do not pull solidified product away from the skin.
 Wash with soap and water.
 If skin irritation or rash occurs: Get medical advice/attention.

After eye contact:

Rinse opened eye for several minutes under running water. Then consult a doctor.
 Remove contact lenses if worn.

After swallowing:

Rinse out mouth and then drink plenty of water.
 Do not induce vomiting; immediately call for medical help.
 A person vomiting while lying on their back should be turned onto their side.

Most important symptoms and effects, both acute and delayed:

Breathing difficulty
 Dizziness
 Coughing
 Irritant to skin and mucous membranes.
 Eye damage.
 Allergic reactions

Danger:

Harmful if swallowed.
 Danger of impaired breathing.
 May be fatal if swallowed and enters airways.

Indication of any immediate medical attention and special treatment needed:

If swallowed or in case of vomiting, danger of entering the lungs.
 If necessary oxygen respiration treatment.
 Later observation for pneumonia and pulmonary edema.

5 Fire-fighting measures

Extinguishing media
Suitable extinguishing agents:

Alcohol resistant foam
 Carbon dioxide

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Gaseous extinguishing agents

Fire-extinguishing powder

Water fog / haze

For safety reasons unsuitable extinguishing agents:

Water stream.

Water spray

Special hazards arising from the substance or mixture

Highly flammable liquid and vapor.

Formation of toxic gases is possible during heating or in case of fire.

Advice for firefighters**Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information:

Eliminate all ignition sources if safe to do so.

Cool endangered containers with water fog.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Keep away from ignition sources.

Wear protective equipment. Keep unprotected persons away.

Environmental precautions Avoid release to the environment.**Methods and material for containment and cleaning up**

Allow to solidify. Pick up mechanically.

Send for recovery or disposal in suitable receptacles.

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

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.

7 Handling and storage

Handling**Precautions for safe handling:**

Use only in well ventilated areas.

Keep out of reach of children.

Open and handle receptacle with care.

Avoid contact with the eyes and skin.

Avoid breathing mist, vapors, or spray.

Information about protection against explosions and fires:

Highly flammable liquid and vapor.

Flammable gas-air mixtures may be formed in empty containers/receptacles.

Conditions for safe storage, including any incompatibilities**Requirements to be met by storerooms and receptacles:**

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- Store in cool, dry conditions in well sealed receptacles.
- Avoid storage near extreme heat, ignition sources or open flame.
- Protect from humidity and water.
- **Information about storage in one common storage facility:**
 - Store away from foodstuffs.
 - Store away from oxidizing agents.
- **Specific end use(s)** No relevant information available.

8 Exposure controls/personal protection

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

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the other constituents have no known exposure limits.

108-21-4 isopropyl acetate

PEL (USA)	Long-term value: 950 mg/m ³ , 250 ppm
TLV (USA)	Short-term value: 626 mg/m ³ , 150 ppm Long-term value: 417 mg/m ³ , 100 ppm
EL (Canada)	Short-term value: 200 ppm Long-term value: 100 ppm
EV (Canada)	Short-term value: 200 ppm Long-term value: 100 ppm
LMPE (Mexico)	Short-term value: 200 ppm Long-term value: 100 ppm

64742-47-8 Distillates (petroleum), hydrotreated light

EL (Canada)	Long-term value: 200 mg/m ³ Skin
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- **Exposure controls**
- **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.
- **Engineering controls:** Provide adequate ventilation.
- **Breathing equipment:** Use suitable respiratory protective device in case of insufficient ventilation.
- **Protection of hands:**



Protective gloves

- **Eye protection:**



Safety glasses

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Follow relevant national guidelines concerning the use of protective eyewear.

- **Body protection:** Protective work clothing
- **Limitation and supervision of exposure into the environment**
No relevant information available.
- **Risk management measures** No relevant information available.

9 Physical and chemical properties

· Information on basic physical and chemical properties

· Appearance:

Form: Liquid
Color: According to product specification

· Odor: Characteristic

· Odor threshold: Not determined.

· pH-value: Not determined.

· Melting point/Melting range: Not determined.

· Boiling point/Boiling range: 104 °C (219.2 °F)

· Flash point: <15 °C (<59 °F)

· Flammability (solid, gaseous): Not applicable.

· Auto-ignition temperature: Not determined.

· Decomposition temperature: Not determined.

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

· Explosion limits

Lower: Not determined.

Upper: Not determined.

· Oxidizing properties: Not determined.

· Vapor pressure: Not determined.

· Density:

Relative density: 0.8

Vapor density: Not determined.

Evaporation rate: Not determined.

· Solubility in / Miscibility with

Water: Slowly reacts with water.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity

Dynamic: Not determined.

Kinematic: Not determined.

· **Other information** No relevant information available.

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10 Stability and reactivity

- **Reactivity:** No relevant information available.
- **Chemical stability:** Stable under normal temperatures and pressures.
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions**
Highly flammable liquid and vapor.
Used empty containers may contain product gases which form explosive mixtures with air.
Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomized.
Reacts with oxidizing agents.
Reacts with peroxides.
Toxic fumes may be released if heated above the decomposition point.
- **Conditions to avoid** Excessive heat.
- **Incompatible materials** Oxidizers
- **Hazardous decomposition products**

Under fire conditions only:
Carbon monoxide and carbon dioxide
Nitrogen oxides (NO_x)

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:** Harmful if swallowed.

- **LD/LC50 values that are relevant for classification:**

475645-84-2 cyclosilazanes, di-Me, Me hydrogen, polymers with di-Me, Me hydrogen silazanes, reaction products with 3-(triethoxysilyl)-1-propanamine

Oral	LD50	>300-2000 mg/kg (rat)
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919-30-2 3-aminopropyltriethoxysilane

Oral	LD50	1780 mg/kg (rat)
Dermal	LD50	4000 mg/kg (rabbit)

- **Primary irritant effect:**
- **On the skin:** Irritant to skin and mucous membranes.
- **On the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitization:** Contains 3-aminopropyltriethoxysilane. May produce an allergic reaction.

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

None of the ingredients are listed.

- **NTP (National Toxicology Program):**

None of the ingredients are listed.

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

None of the ingredients are listed.

- **Probable route(s) of exposure:**

Ingestion.
Inhalation.

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Eye contact.

Skin contact.

- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
- **Carcinogenicity:** Based on available data, the classification criteria are not met.
- **Reproductive toxicity:** Based on available data, the classification criteria are not met.
- **STOT-single exposure:** May cause drowsiness or dizziness.
- **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
- **Aspiration hazard:** May be fatal if swallowed and enters airways.

12 Ecological information

· Toxicity**· Aquatic toxicity**

Harmful to aquatic life with long lasting effects.

475645-84-2 cyclosilazanes, di-Me, Me hydrogen, polymers with di-Me, Me hydrogen silazanes, reaction products with 3-(triethoxysilyl)-1-propanamine

LC50 57.1 mg/l (zebra fish)

· Persistence and degradability No relevant information available.**· Bioaccumulative potential:** No relevant information available.**· Mobility in soil:** No relevant information available.**· Additional ecological information****· General notes:**

Avoid release to the environment.

Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded.

· Results of PBT and vPvB assessment**· PBT:** Not applicable.**· vPvB:** Not applicable.**· Other adverse effects** No relevant information available.

13 Disposal considerations

· Waste treatment methods**· Recommendation:**

Can be disposed of with household garbage after solidification following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

· Uncleaned packagings**· Recommendation:** Disposal must be made according to official regulations.

14 Transport information

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· UN-Number	UN1139
· DOT, ADR, IMDG, IATA	UN1139
· UN proper shipping name	Coating solution
· DOT, IATA	COATING SOLUTION
· ADR, IMDG	COATING SOLUTION
· Transport hazard class(es)	
· DOT	
	
· Class	3 Flammable liquids
· Label	3
· ADR	
	
· Class	3 (F1) Flammable liquids
· Label	3
· IMDG, IATA	
	
· Class	3 Flammable liquids
· Label	3
· Packing group	II
· DOT, ADR, IMDG, IATA	II
· Environmental hazards	
· Marine pollutant:	No
· Special precautions for user	Warning: Flammable liquids
· Danger code (Kemler):	33
· EMS Number:	F-E, <u>S</u> -E
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· DOT	
	Limited Quantity for packages less than 30 kg gross and inner packagings less than 5 L each.

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· ADR


Limited Quantity for packages less than 30 kg gross and inner packagings less than 5 L each.

· IMDG


Limited Quantity for packages less than 30 kg gross and inner packagings less than 5 L each.

· IATA


Limited Quantity for packages less than 30 kg gross and inner packagings less than 0.5 L each / 1 L net.

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **United States (USA)**
- **SARA**

· Section 302 (extremely hazardous substances):

None of the ingredients are listed.

· Section 355 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

· TSCA (Toxic Substances Control Act)

All ingredients are listed.

· Proposition 65 (California)
· Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

· EPA (Environmental Protection Agency):

None of the ingredients are listed.

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· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

· Canadian Domestic Substances List (DSL):

All ingredients listed on DSL or NDSL.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Date of preparation / last revision April 20, 2018 / -**· Abbreviations and acronyms:**

ADR: 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

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

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bio-accumulable, Toxic

vPvB: very Persistent and very Bioaccumulative

OSHA: Occupational Safety & Health Administration

Flam. Liq. 2: Flammable liquids – Category 2

Flam. Liq. 3: Flammable liquids – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Skin Sens. 1: Skin sensitisation – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Asp. Tox. 1: Aspiration hazard – Category 1

· SourcesWebsite, European Chemicals Agency (echa.europa.eu)Website, US EPA Substance Registry Services (ofmpub.epa.gov/sorinternet/registry/substreg/home/overview/home.do)Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaassen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

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