



Safety Data Sheet
acc. to OSHA HCS & WHMIS

Printing date 09/28/2015

Reviewed on 09/28/2015

1 Identification

- **Product identifier:** CLEANER-NUCLEAR
- **Trade name:** CANTESCO® SOLVENT CLEANER – C101 STANDARD
- **Code** C101-A
- **Item number(s):** C101-A
- **MSDS Number:** 12
- **UPC bar code(s):** 699913-10385
- **Relevant identified uses of the substance:** DYE PENETRANT CLEANER
- **Manufacturer/Supplier:**
WWW.CANTESCO.COM

USA ADDRESS:

KEMPER SYSTEM AMERICA, INC.
1200 NORTH AMERICA DR,
WEST SENECA, NY 14224
PH (716) 558-2971

CANADIAN ADDRESS:

KEMPER SYSTEM CANADA
6345 NETHERHART ROAD
MISSISSAUGA, ON L5T 1B8
PH (905) 624-5463
FAX (905) 624-2840

- **Information department:**
Tel: (716) 558-2971 ext. 228
www.cantesco.com
- **Emergency telephone number:**
ChemTrec (800) 424-9300
Canada only: CANUTECH (Call collect) (613) 996-6666

2 Hazard(s) identification

- **Classification of the substance or mixture:**



GHS02 Flame

Flam. Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurized container: May burst if heated.



GHS08 Health hazard

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



GHS07

Eye Irrit. 2A H319 Causes serious eye irritation.

- **Label elements**

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

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Trade name: CANTESCO® SOLVENT CLEANER – C101 STANDARD

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· **Signal word:** Danger

· **Hazard-determining components of labeling:**

Distillates (petroleum), hydrotreated light

· **Hazard statements:**

Extremely flammable aerosol. Pressurized container: May burst if heated.

Causes serious eye irritation.

May be fatal if swallowed and enters airways.

· **Precautionary statements:**

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

Pressurized container: Do not pierce or burn, even after use.

Do not spray on an open flame or other ignition source.

Wear protective gloves/protective clothing/eye protection/face protection.

Wash thoroughly after handling.

If swallowed: Immediately call a poison center/doctor.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation persists: Get medical advice/attention.

Do NOT induce vomiting.

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **WHMIS-symbols:**

A - Compressed gas

B5 - Flammable aerosol

D2A - Very toxic material causing other toxic effects



· **NFPA ratings (scale 0 - 4):**



Health = 2

Fire = 4

Reactivity = 0

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

64742-47-8	Distillates (petroleum), hydrotreated light	30-60%
68476-86-8	Petroleum gases, liquefied, sweetened	10-<25%
67-63-0	propan-2-ol	10-<15%
67-64-1	acetone	≤10%
78-93-3	butanone	3-7%
108-65-6	2-methoxy-1-methylethyl acetate	1-<3%

· **Additional information:** Exact concentrations are being withheld as trade secrets.

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4 First-aid measures

- **General information:** Symptoms of poisoning may even occur after several hours.
- **After inhalation:**
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**
Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.
- **After eye contact:**
Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. If eye irritation persists get medical advice/attention.
- **After swallowing:** If swallowed, do not induce vomiting. Get medical attention right away.
- **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

- **Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture:** No further relevant information available.
- **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures:**
Wear protective equipment. Keep unprotected persons away.
- **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:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
- **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:**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
- **Information about protection against explosions and fires:**
Do not spray on a naked flame or any incandescent material.
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

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Keep respiratory protective device available.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights. Do not pierce or burn, even after use.

· **Storage**

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

Store in a cool location.

Observe official regulations on storing packagings with pressurized containers.

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

· **Further information about storage conditions:**

Keep receptacle tightly sealed.

Do not gas tight seal receptacle.

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

· **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.

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

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

EL (Canada)	Long-term value: 200 mg/m ³ Skin
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67-63-0 propan-2-ol

EL (Canada)	Short-term value: 400 ppm Long-term value: 200 ppm
EV (Canada)	Short-term value: 400 ppm Long-term value: 200 ppm
PEL (USA)	Long-term value: 980 mg/m ³ , 400 ppm
REL (USA)	Short-term value: 1225 mg/m ³ , 500 ppm Long-term value: 980 mg/m ³ , 400 ppm
TLV (USA)	Short-term value: 984 mg/m ³ , 400 ppm Long-term value: 492 mg/m ³ , 200 ppm BEI

67-64-1 acetone

EL (Canada)	Short-term value: 500 ppm Long-term value: 250 ppm
EV (Canada)	Short-term value: 750 ppm Long-term value: 500 ppm
PEL (USA)	Long-term value: 2400 mg/m ³ , 1000 ppm
REL (USA)	Long-term value: 590 mg/m ³ , 250 ppm
TLV (USA)	Short-term value: (1782) NIC-1187 mg/m ³ , (750) NIC-500 ppm Long-term value: (1188) NIC-594 mg/m ³ , (500) NIC-250 ppm BEI

78-93-3 butanone

EL (Canada)	Short-term value: 100 ppm Long-term value: 50 ppm
EV (Canada)	Short-term value: 885 mg/m ³ , 300 ppm Long-term value: 590 mg/m ³ , 200 ppm

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PEL (USA)	Long-term value: 590 mg/m ³ , 200 ppm
REL (USA)	Short-term value: 885 mg/m ³ , 300 ppm Long-term value: 590 mg/m ³ , 200 ppm
TLV (USA)	Short-term value: 885 mg/m ³ , 300 ppm Long-term value: 590 mg/m ³ , 200 ppm BEI

108-65-6 2-methoxy-1-methylethyl acetate

EL (Canada)	Short-term value: 75 ppm Long-term value: 50 ppm
EV (Canada)	Long-term value: 270 mg/m ³ , 50 ppm
WEEL (USA)	Long-term value: 50 ppm

· Ingredients with biological limit values:
67-63-0 propan-2-ol

BEI (USA)	40 mg/L Medium: urine Time: end of shift at end of workweek Parameter: Acetone (background, nonspecific)
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67-64-1 acetone

BEI (USA)	50 mg/L Medium: urine Time: end of shift Parameter: Acetone (nonspecific)
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78-93-3 butanone

BEI (USA)	2 mg/L Medium: urine Time: end of shift Parameter: MEK
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· **Additional information:** The lists that were valid during the creation were used as basis.

· **Personal protective equipment**

· **General protective and hygienic measures:**

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- Store protective clothing separately.
- Avoid contact with the eyes and skin.

· **Breathing equipment:** Use suitable respiratory protective device in case of insufficient ventilation.

· **Protection of hands:**



Protective gloves

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

· **Material of gloves:**

- Butyl rubber, BR
- Nitrile rubber, NBR

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· **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· Form:	Liquid Under Pressure
· Color:	Colorless
· Odor:	Solvent-like
· Odour threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	-95.3 °C
Boiling point/Boiling range:	> 56 °C
· Flash point:	-104 °C (Prop. (-17 °C liq.))
· Flammability (solid, gaseous):	Extremely flammable liquefied gas.
· Ignition temperature:	210 °C
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits	
Lower:	0.5 Vol %
Upper:	13.0 Vol %
· Vapor pressure at 20 °C:	233 hPa
· Density at 20 °C:	0.8 g/cm ³
· Relative density:	Not determined.
· Vapour density at 20 °C:	4.6 (AIR=1)
· Evaporation rate:	Not applicable.
· Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	33.3 %

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· Other information	VOC Content:	693.090 g/l
	VOC %:	>99 %
	HAP Content	154.020 g/l
	MIR Value	2.472 g O ₃ /g

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects:**
- **Acute toxicity**
- **Specific symptoms in biological assay:** No further relevant information available.
- **Primary irritant effect**
- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
Irritant
Carcinogenic.
The product can cause inheritable damage.

- **Carcinogenic categories**

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

67-63-0 | propan-2-ol

3

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

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

None of the ingredients is listed.

12 Ecological information

- **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:**

Water hazard class 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

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· **Other adverse effects:** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**

· **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings**

· **Recommendation:**

Place in a sealed container and label as waste. Place in a safe area, and comply with all federal, state, provincial and local regulations for disposal.

14 Transport information

· **UN-Number**

· **DOT, TDG, IMDG, IATA**

UN1950

· **UN proper shipping name**

· **DOT**

Aerosols, flammable

· **TDG**

1950 Aerosols

· **IMDG**

AEROSOLS

· **IATA**

AEROSOLS, flammable

· **Transport hazard class(es)**

· **DOT**



· **Class**

2.1

· **Label**

2.1

· **TDG (Transport dangerous goods):**



· **Class**

2 5F Gases

· **Label**

2.1

· **IMDG, IATA**



· **Class**

2.1

· **Label**

2.1

· **Packing group**

· **DOT, TDG, IMDG, IATA**

Not regulated

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· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user:	Warning: Gases
· Danger code (Kemler):	-
· EMS Number:	F-D,S-U
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:	Not applicable.
· Transport/Additional information:	
· DOT	
· Quantity limitations	On passenger aircraft/rail: 75 kg On cargo aircraft only: 150 kg
· Remarks:	This product may be shipped according to the Limited Quantity Exceptions provided that all Limited Quantity shipping requirements are met.
· TDG	This product may be shipped according to the Limited Quantity Exceptions provided that all Limited Quantity shipping requirements are met.
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· Remarks:	This product may be shipped according to the Limited Quantity Exceptions provided that all Limited Quantity shipping requirements are met.
· IATA	
· Remarks:	This product may be shipped according to the Limited Quantity Exceptions provided that all Limited Quantity shipping requirements are met.
· UN "Model Regulation":	UN1950, Aerosols, 2.1

15 Regulatory information

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

· Sara

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

None of the ingredients is listed.

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

67-63-0 | propan-2-ol

78-93-3 | butanone

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

All ingredients are listed or exempted

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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:**

None of the ingredients is listed.

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

None of the ingredients is listed.

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

Exposure during foreseeable use has been determined to be below the Maximum Allowable Dose Level.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency):**

67-64-1	acetone	I
78-93-3	butanone	I

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

67-63-0	propan-2-ol	A4
67-64-1	acetone	A4

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

None of the ingredients is listed.

· **Canadian substance listings**

· **Canadian Domestic Substances List (DSL):**

All ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 0.1%):**

None of the ingredients is listed.

· **Canadian Ingredient Disclosure list (limit 1%):**

67-63-0	propan-2-ol
67-64-1	acetone
78-93-3	butanone

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

· **Hazard pictograms**



GHS02 GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**

Distillates (petroleum), hydrotreated light

· **Hazard statements**

Extremely flammable aerosol. Pressurized container: May burst if heated.

Causes serious eye irritation.

May be fatal if swallowed and enters airways.

· **Precautionary statements**

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

Pressurized container: Do not pierce or burn, even after use.

Do not spray on an open flame or other ignition source.

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Wear protective gloves/protective clothing/eye protection/face protection.
 Wash thoroughly after handling.
 If swallowed: Immediately call a poison center/doctor.
 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 If eye irritation persists: Get medical advice/attention.
 Do NOT induce vomiting.
 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **National regulations:**

· **Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

16 Other information

This MSDS format meets ANSI Z400.1-1998, OSHA 1910.1200 and WHMIS requirements. Kemper System America, Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Product use and conditions of use are beyond the control of Kemper System America, Inc. Warranty of materials is limited to test results of product performance as detailed in certificates of compliance. Interpretation of test results is the responsibility of end-user. No other warranties, expressed or implied, are made. Kemper System America, Inc is an ISO 9001:2008 and ISO 14001:2004 registered company.

· **Department issuing MSDS:** Product safety department

· **Contact:** Stephen Nowicki

· **Date of preparation / last revision** 09/28/2015 / 2

· **Abbreviations and acronyms:**

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)

WHMIS: Workplace Hazardous Materials Information System (Canada)

Flam. Aerosol 1: Flammable aerosols, Hazard Category 1

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

Asp. Tox. 1: Aspiration hazard, Hazard Category 1



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1 Identification

- **Product identifier:** PENETRANT - WATER
- **Trade name:** CANTESCO® VISIBLE DYE PENETRANT P301W – WATER WASHABLE
- **Code** P301W-A
- **Item number(s):** P301W-A
- **MSDS Number:** 37
- **UPC bar code(s):** 699913-10025
- **Relevant identified uses of the substance:** INSPECTION DYE
- **Manufacturer/Supplier:**
WWW.CANTESCO.COM

USA ADDRESS:

KEMPER SYSTEM AMERICA, INC.
1200 NORTH AMERICA DR,
WEST SENECA, NY 14224
PH (716) 558-2971

CANADIAN ADDRESS:

KEMPER SYSTEM CANADA
6345 NETHERHART ROAD
MISSISSAUGA, ON L5T 1B8
PH (905) 624-5463
FAX (905) 624-2840

- **Information department:**
Tel: (716) 558-2971 ext. 228
www.cantesco.com
- **Emergency telephone number:**
ChemTrec (800) 424-9300
Canada only: CANUTECH (Call collect) (613) 996-6666

2 Hazard(s) identification

- **Classification of the substance or mixture:**



GHS02 Flame

Flam. Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurized container: May burst if heated.



GHS08 Health hazard

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

- **Label elements**

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

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· **Signal word:** Danger

· **Hazard-determining components of labeling:**

Solvent naphtha (petroleum), heavy arom.
Polyoxyethylene (9) nonylphenylether, branched
C.I. SOLVENT RED 164

· **Hazard statements:**

Extremely flammable aerosol. Pressurized container: May burst if heated.
Harmful if swallowed.
May be fatal if swallowed and enters airways.

· **Precautionary statements:**

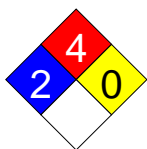
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Pressurized container: Do not pierce or burn, even after use.
Do not spray on an open flame or other ignition source.
Wear protective gloves/protective clothing/eye protection/face protection.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
If swallowed: Immediately call a poison center/doctor.
If swallowed: Rinse mouth. Do NOT induce vomiting.
Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· **WHMIS-symbols:**

A - Compressed gas
B5 - Flammable aerosol
D2B - Toxic material causing other toxic effects



· **NFPA ratings (scale 0 - 4):**



Health = 2
Fire = 4
Reactivity = 0

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

64742-94-5	Solvent naphtha (petroleum), heavy arom.	40-70%
68476-85-7	Petroleum gases, liquefied	25-30%
68412-54-4	Polyoxyethylene (9) nonylphenylether, branched	3-5%
71819-51-7	C.I. SOLVENT RED 164	1-1.5%
1330-20-7	xylene	≤1%
100-41-4	ethylbenzene	≤1%

· **Additional information:** Exact concentrations are being withheld as trade secrets.

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4 First-aid measures

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** Do not induce vomiting, Immediately call a poison center/ 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

- **Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture:** No further relevant information available.
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures:**
Wear protective equipment. Keep unprotected persons away.
- **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:**
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
- **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:**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
- **Information about protection against explosions and fires:**
Do not spray on a naked flame or any incandescent material.
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights. Do not pierce or burn, even after use.
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Observe official regulations on storing packagings with pressurized containers.
- **Information about storage in one common storage facility:** Not required.

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Trade name: CANTESCO® VISIBLE DYE PENETRANT P301W – WATER WASHABLE

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- **Further information about storage conditions:**
 - Keep receptacle tightly sealed.
 - Do not gas tight seal receptacle.
 - Store in cool, dry conditions in well sealed receptacles.
 - Protect from heat and direct sunlight.
- **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.

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

68476-85-7 Petroleum gases, liquefied

EL (Canada)	Short-term value: 1250 ppm Long-term value: 1000 ppm
PEL (USA)	Long-term value: 1800 mg/m ³ , 1000 ppm
REL (USA)	Long-term value: 1800 mg/m ³ , 1000 ppm
TLV (USA)	refer to Appendix F: minimal oxygen content

1330-20-7 xylene

EL (Canada)	Short-term value: 150 ppm Long-term value: 100 ppm
EV (Canada)	Short-term value: 650 mg/m ³ , 150 ppm Long-term value: 435 mg/m ³ , 100 ppm
PEL (USA)	Long-term value: 435 mg/m ³ , 100 ppm
REL (USA)	Short-term value: 655 mg/m ³ , 150 ppm Long-term value: 435 mg/m ³ , 100 ppm
TLV (USA)	Short-term value: 651 mg/m ³ , 150 ppm Long-term value: 434 mg/m ³ , 100 ppm BEI

100-41-4 ethylbenzene

EL (Canada)	Long-term value: 20 ppm IARC 2B
EV (Canada)	Short-term value: 540 mg/m ³ , 125 ppm Long-term value: 435 mg/m ³ , 100 ppm
PEL (USA)	Long-term value: 435 mg/m ³ , 100 ppm
REL (USA)	Short-term value: 545 mg/m ³ , 125 ppm Long-term value: 435 mg/m ³ , 100 ppm
TLV (USA)	Long-term value: 87 mg/m ³ , 20 ppm BEI

· **Ingredients with biological limit values:**

1330-20-7 xylene

BEI (USA)	1.5 g/g creatinine Medium: urine Time: end of shift Parameter: Methylhippuric acids
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100-41-4 ethylbenzene

BEI (USA)	0.7 g/g creatinine Medium: urine Time: end of shift at end of workweek Parameter: Sum of mandelic acid and phenylglyoxylic acid (nonspecific, semi-quantitative)
-	Medium: end-exhaled air Time: not critical Parameter: Ethyl benzene (semi-quantitative)

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
- **Breathing equipment:** Use suitable respiratory protective device in case of insufficient ventilation.
- **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- **Material of gloves:**
Butyl rubber, BR
Nitrile rubber, NBR
- **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· Form:	Liquid Under Pressure
· Color:	Dark red
· Odor:	Aromatic
· Odour threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	132 °C
· Flash point:	< -18 °C
· Flammability (solid, gaseous):	Extremely flammable liquefied gas.
· Ignition temperature:	
Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits	
Lower:	Not determined.

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Trade name: CANTESCO® VISIBLE DYE PENETRANT P301W – WATER WASHABLE

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Upper:	Not determined.
· Vapor pressure:	Not determined.
· Density at 20 °C:	0.777 g/cm ³
· Relative density:	Not determined.
· Vapour density at 20 °C:	>1 (AIR=1)
· Evaporation rate:	Not applicable.
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	2.0 %
· Other information	% Volatile by volume: 93.0%

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects:**
- **Acute toxicity**
- **Primary irritant effect**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**

- **Carcinogenic categories**

· IARC (International Agency for Research on Cancer)		
1330-20-7	xylene	3
100-41-4	ethylbenzene	2B

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

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

None of the ingredients is listed.

12 Ecological information

- **Aquatic toxicity:** No further relevant information available.

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Trade name: CANTESCO® VISIBLE DYE PENETRANT P301W – WATER WASHABLE

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- **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:**
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
- **Other adverse effects:** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings**
- **Recommendation:**
Place in a sealed container and label as waste. Place in a safe area, and comply with all federal, state, provincial and local regulations for disposal.

14 Transport information

- | | |
|--|--|
| <ul style="list-style-type: none"> · UN-Number · DOT, TDG, IMDG, IATA | <p style="margin: 0;">UN1950</p> |
| <ul style="list-style-type: none"> · UN proper shipping name · DOT · TDG · IMDG · IATA | <p style="margin: 0;">Aerosols, flammable
1950 Aerosols
AEROSOLS
AEROSOLS, flammable</p> |

- **Transport hazard class(es)**
- **DOT**
- 
- **Class** 2.1
- **Label** 2.1
- **TDG (Transport dangerous goods):**



- **Class** 2 5F Gases

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Trade name: CANTESCO® VISIBLE DYE PENETRANT P301W – WATER WASHABLE

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· **Label** 2.1

· **IMDG, IATA**



· **Class** 2.1
 · **Label** 2.1

· **Packing group**
 · **DOT, TDG, IMDG, IATA** Not regulated

· **Environmental hazards:**
 · **Marine pollutant:** No

· **Special precautions for user:** Warning: Gases
 · **Danger code (Kemler):** -
 · **EMS Number:** F-D,S-U

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.

· **Transport/Additional information:**

· **DOT**
 · **Quantity limitations** On passenger aircraft/rail: 75 kg
 On cargo aircraft only: 150 kg
 · **Remarks:** This product may be shipped according to the Limited Quantity Exceptions provided that all Limited Quantity shipping requirements are met.

· **TDG** This product may be shipped according to the Limited Quantity Exceptions provided that all Limited Quantity shipping requirements are met.
 · **Excepted quantities (EQ)** Code: E0
 Not permitted as Excepted Quantity

· **IMDG**
 · **Limited quantities (LQ)** 1L
 · **Excepted quantities (EQ)** Code: E0
 Not permitted as Excepted Quantity
 · **Remarks:** This product may be shipped according to the Limited Quantity Exceptions provided that all Limited Quantity shipping requirements are met.

· **IATA**
 · **Remarks:** This product may be shipped according to the Limited Quantity Exceptions provided that all Limited Quantity shipping requirements are met.

· **UN "Model Regulation":** UN1950, Aerosols, 2.1

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15 Regulatory information

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

· **Sara**

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

None of the ingredients is listed.

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

1330-20-7	xylylene
-----------	----------

100-41-4	ethylbenzene
----------	--------------

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

All ingredients are listed or exempted

· **Proposition 65**

· **Chemicals known to cause cancer:**

100-41-4	ethylbenzene
----------	--------------

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

None of the ingredients is listed.

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

None of the ingredients is listed.

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

Exposure during foreseeable use has been determined to be below the Maximum Allowable Dose Level.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency):**

1330-20-7	xylylene		I
-----------	----------	--	---

100-41-4	ethylbenzene		D
----------	--------------	--	---

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

1330-20-7	xylylene		A4
-----------	----------	--	----

100-41-4	ethylbenzene		A3
----------	--------------	--	----

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

None of the ingredients is listed.

· **Canadian substance listings**

· **Canadian Domestic Substances List (DSL):**

All ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 0.1%):**

100-41-4	ethylbenzene
----------	--------------

· **Canadian Ingredient Disclosure list (limit 1%):**

None of the ingredients is listed.

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

· **Hazard pictograms**



GHS02



GHS07



GHS08

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Trade name: CANTESCO® VISIBLE DYE PENETRANT P301W – WATER WASHABLE

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· **Signal word** Danger

· **Hazard-determining components of labeling:**

Solvent naphtha (petroleum), heavy arom.
Polyoxyethylene (9) nonylphenylether, branched
C.I. SOLVENT RED 164

· **Hazard statements**

Extremely flammable aerosol. Pressurized container: May burst if heated.
Harmful if swallowed.
May be fatal if swallowed and enters airways.

· **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Pressurized container: Do not pierce or burn, even after use.
Do not spray on an open flame or other ignition source.
Wear protective gloves/protective clothing/eye protection/face protection.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
If swallowed: Immediately call a poison center/doctor.
If swallowed: Rinse mouth. Do NOT induce vomiting.
Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
Dispose of contents/container in accordance with local/regional/national/international regulations.

16 Other information

This MSDS format meets ANSI Z400.1-1998, OSHA 1910.1200 and WHMIS requirements. Kemper System America, Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Product use and conditions of use are beyond the control of Kemper System America, Inc. Warranty of materials is limited to test results of product performance as detailed in certificates of compliance. Interpretation of test results is the responsibility of end-user. No other warranties, expressed or implied, are made. Kemper System America, Inc is an ISO 9001:2008 and ISO 14001:2004 registered company.

· **Department issuing MSDS:** Product safety department

· **Contact:** Stephen Nowicki

· **Date of preparation / last revision** 09/28/2015 / -

· **Abbreviations and acronyms:**

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)
WHMIS: Workplace Hazardous Materials Information System (Canada)
Flam. Aerosol 1: Flammable aerosols, Hazard Category 1
Acute Tox. 4: Acute toxicity, Hazard Category 4
Asp. Tox. 1: Aspiration hazard, Hazard Category 1

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1 Identification

- **Product identifier:** DEVELOPER-STANDARD
- **Trade name:** CANTESCO® DEVELOPER D101 - NONAQUEOUS WET
- **Code** D101-A
- **Item number(s):** D101-A
- **MSDS Number:** 13
- **UPC bar code(s):** 699913-10370
- **Relevant identified uses of the substance:** DYE PENETRANT DEVELOPER
- **Manufacturer/Supplier:**
WWW.CANTESCO.COM

USA ADDRESS:

KEMPER SYSTEM AMERICA, INC.
1200 NORTH AMERICA DR,
WEST SENECA, NY 14224
PH (716) 558-2971

CANADIAN ADDRESS:

KEMPER SYSTEM CANADA
6345 NETHERHART ROAD
MISSISSAUGA, ON L5T 1B8
PH (905) 624-5463
FAX (905) 624-2840

- **Information department:**
Tel: (716) 558-2971 ext. 228
www.cantesco.com
- **Emergency telephone number:**
ChemTrec (800) 424-9300
Canada only: CANUTECH (Call collect) (613) 996-6666

2 Hazard(s) identification

- **Classification of the substance or mixture:**



GHS02 Flame

Flam. Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurized container: May burst if heated.



GHS07

Eye Irrit. 2A H319 Causes serious eye irritation.
STOT SE 3 H336 May cause drowsiness or dizziness.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Signal word:** Danger
- **Hazard-determining components of labeling:**
acetone

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Trade name: CANTESCO® DEVELOPER D101 - NONAQUEOUS WET

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· Hazard statements:

Extremely flammable aerosol. Pressurized container: May burst if heated.
Causes serious eye irritation.
May cause drowsiness or dizziness.

· Precautionary statements:

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Pressurized container: Do not pierce or burn, even after use.
Do not spray on an open flame or other ignition source.
Avoid breathing dust/fume/gas/mist/vapors/spray
Wear eye protection / face protection.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Call a poison center/doctor if you feel unwell.
If eye irritation persists: Get medical advice/attention.
Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· WHMIS-symbols:

A - Compressed gas
B5 - Flammable aerosol
D2A - Very toxic material causing other toxic effects


· NFPA ratings (scale 0 - 4):


Health = 2
Fire = 4
Reactivity = 0

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:

67-64-1	acetone	30-60%
68476-86-8	Petroleum gases, liquefied, sweetened	25-40%
14808-60-7	Quartz (SiO ₂)	0.3-<1%

· Additional information: Exact concentrations are being withheld as trade secrets.

4 First-aid measures

· After inhalation:

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.

· After skin contact: Immediately rinse with water.

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Trade name: CANTESCO® DEVELOPER D101 - NONAQUEOUS WET

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- **After eye contact:**
Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. If eye irritation persists get medical advice/attention.
- **After swallowing:** If symptoms persist consult 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

- **Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture:** No further relevant information available.
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures:**
Wear protective equipment. Keep unprotected persons away.
- **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:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
- **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:**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
- **Information about protection against explosions and fires:**
Do not spray on a naked flame or any incandescent material.
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights. Do not pierce or burn, even after use.
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Observe official regulations on storing packagings with pressurized containers.
- **Information about storage in one common storage facility:** Not required.

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Trade name: CANTESCO® DEVELOPER D101 - NONAQUEOUS WET

(Contd. of page 3)

- **Further information about storage conditions:**
 - Keep receptacle tightly sealed.
 - Do not gas tight seal receptacle.
 - Store in cool, dry conditions in well sealed receptacles.
 - Protect from heat and direct sunlight.
- **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.

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

67-64-1 acetone

EL (Canada)	Short-term value: 500 ppm Long-term value: 250 ppm
EV (Canada)	Short-term value: 750 ppm Long-term value: 500 ppm
PEL (USA)	Long-term value: 2400 mg/m ³ , 1000 ppm
REL (USA)	Long-term value: 590 mg/m ³ , 250 ppm
TLV (USA)	Short-term value: (1782) NIC-1187 mg/m ³ , (750) NIC-500 ppm Long-term value: (1188) NIC-594 mg/m ³ , (500) NIC-250 ppm BEI

· **Ingredients with biological limit values:**

67-64-1 acetone

BEI (USA)	50 mg/L Medium: urine Time: end of shift Parameter: Acetone (nonspecific)
-----------	--

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures:**
 - Keep away from foodstuffs, beverages and feed.
 - Immediately remove all soiled and contaminated clothing.
 - Wash hands before breaks and at the end of work.
 - Store protective clothing separately.
 - Avoid contact with the eyes.
 - Avoid contact with the eyes and skin.
- **Breathing equipment:** Use suitable respiratory protective device in case of insufficient ventilation.
- **Protection of hands:**



Protective gloves

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

- **Material of gloves:**
 - Butyl rubber, BR
 - Nitrile rubber, NBR

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Trade name: CANTESCO® DEVELOPER D101 - NONAQUEOUS WET

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· **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· Form:	Liquid Under Pressure
· Color:	Cloudy
· Odor:	Mild
· Odour threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	-95.3 °C
Boiling point/Boiling range:	> 56 °C
· Flash point:	-104 °C (Prop. (-17 °C Liq.))
· Flammability (solid, gaseous):	Extremely flammable liquefied gas.
· Ignition temperature:	465 °C
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits	
Lower:	2.6 Vol %
Upper:	13.0 Vol %
· Vapor pressure at 20 °C:	233 hPa
· Density at 20 °C:	0.715 g/cm ³
· Relative density:	Not determined.
· Vapour density at 20 °C:	2.0 (AIR=1)
· Evaporation rate at 20 °C:	>5.7 (BA=1)
· Solubility in / Miscibility with	
Water:	Emulsifiable.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	54.5 %

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Trade name: CANTESCO® DEVELOPER D101 - NONAQUEOUS WET

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Solids content:	9.1 %	
· Other information	VOC Content:	259.994 g/l
	VOC %:	37%
	HAP Content:	None
	MIR Value:	0.588 g O ₃ /g
	Heat of Combustion:	31.592 MJ/kg

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects:**
- **Acute toxicity**

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

67-64-1 acetone

Oral	LD50	5800 mg/kg (rat)
Dermal	LD50	20000 mg/kg (rabbit)

- **Primary irritant effect**
- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:
 Irritant
 Carcinogenic.
 The product can cause inheritable damage.

- **Carcinogenic categories**

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

7631-86-9	silicon dioxide, chemically prepared	3
14808-60-7	Quartz (SiO ₂)	1
71-43-2	benzene	1

- **NTP (National Toxicology Program)**

14808-60-7	Quartz (SiO ₂)	K
71-43-2	benzene	K

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

71-43-2	benzene	
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Trade name: CANTESCO® DEVELOPER D101 - NONAQUEOUS WET

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12 Ecological information

- **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:**
 Water hazard class 3 (Self-assessment): extremely hazardous for water
 Do not allow product to reach ground water, water course or sewage system, even in small quantities.
 Danger to drinking water if even extremely small quantities leak into the ground.
- **Other adverse effects:** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
 Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings**
- **Recommendation:**
 Place in a sealed container and label as waste. Place in a safe area, and comply with all federal, state, provincial and local regulations for disposal.

14 Transport information

- | | |
|--|---|
| <ul style="list-style-type: none"> · UN-Number · DOT, TDG, IMDG, IATA | UN1950 |
| <ul style="list-style-type: none"> · UN proper shipping name · DOT · TDG · IMDG · IATA | Aerosols, flammable
1950 Aerosols
AEROSOLS
AEROSOLS, flammable |
| <ul style="list-style-type: none"> · Transport hazard class(es) · DOT | <div style="text-align: center;">  </div> |
| <ul style="list-style-type: none"> · Class · Label · TDG (Transport dangerous goods): | 2.1
2.1 |
| <ul style="list-style-type: none"> · Class | <div style="text-align: center;">  </div> 2 5F Gases |

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· **Label** 2.1

· **IMDG, IATA**



· **Class** 2.1
 · **Label** 2.1

· **Packing group**
 · **DOT, TDG, IMDG, IATA** Not regulated

· **Environmental hazards:**
 · **Marine pollutant:** No

· **Special precautions for user:** Warning: Gases
 · **Danger code (Kemler):** -
 · **EMS Number:** F-D,S-U

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.

· **Transport/Additional information:**

· **DOT**
 · **Quantity limitations** On passenger aircraft/rail: 75 kg
 On cargo aircraft only: 150 kg
 · **Remarks:** This product may be shipped according to the Limited Quantity Exceptions provided that all Limited Quantity shipping requirements are met.

· **TDG** This product may be shipped according to the Limited Quantity Exceptions provided that all Limited Quantity shipping requirements are met.
 · **Excepted quantities (EQ)** Code: E0
 Not permitted as Excepted Quantity

· **IMDG**
 · **Limited quantities (LQ)** 1L
 · **Excepted quantities (EQ)** Code: E0
 Not permitted as Excepted Quantity
 · **Remarks:** This product may be shipped according to the Limited Quantity Exceptions provided that all Limited Quantity shipping requirements are met.

· **IATA**
 · **Remarks:** This product may be shipped according to the Limited Quantity Exceptions provided that all Limited Quantity shipping requirements are met.

· **UN "Model Regulation":** UN1950, Aerosols, 2.1

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15 Regulatory information

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

· **Sara**

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

None of the ingredients is listed.

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

71-43-2 | benzene

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

All ingredients are listed or exempted

· **Proposition 65**

· **Chemicals known to cause cancer:**

14808-60-7 | Quartz (SiO₂)

71-43-2 | benzene

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

None of the ingredients is listed.

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

71-43-2 | benzene

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

71-43-2 | benzene

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency):**

67-64-1 | acetone

I

71-43-2 | benzene

A, K/L

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

67-64-1 | acetone

A4

14808-60-7 | Quartz (SiO₂)

A2

71-43-2 | benzene

A1

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

14808-60-7 | Quartz (SiO₂)

71-43-2 | benzene

· **Canadian substance listings**

· **Canadian Domestic Substances List (DSL):**

All ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 0.1%):**

None of the ingredients is listed.

· **Canadian Ingredient Disclosure list (limit 1%):**

67-64-1 | acetone

7631-86-9 | silicon dioxide, chemically prepared

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

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· **Hazard pictograms**



GHS02 GHS07

· **Signal word** Danger

· **Hazard-determining components of labeling:**

acetone

· **Hazard statements**

Extremely flammable aerosol. Pressurized container: May burst if heated.

Causes serious eye irritation.

May cause drowsiness or dizziness.

· **Precautionary statements**

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

Pressurized container: Do not pierce or burn, even after use.

Do not spray on an open flame or other ignition source.

Avoid breathing dust/fume/gas/mist/vapors/spray

Wear eye protection / face protection.

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Call a poison center/doctor if you feel unwell.

If eye irritation persists: Get medical advice/attention.

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **National regulations:**

· **Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation.

Exceptions can be made by the authorities in certain cases.

16 Other information

This MSDS format meets ANSI Z400.1-1998, OSHA 1910.1200 and WHMIS requirements. Kemper System America, Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Product use and conditions of use are beyond the control of Kemper System America, Inc. Warranty of materials is limited to test results of product performance as detailed in certificates of compliance. Interpretation of test results is the responsibility of end-user. No other warranties, expressed or implied, are made. Kemper System America, Inc is an ISO 9001:2008 and ISO 14001:2004 registered company.

· **Department issuing MSDS:** Product safety department

· **Contact:** Stephen Nowicki

· **Date of preparation / last revision** 09/28/2015 / 2

· **Abbreviations and acronyms:**

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

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ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Flam. Aerosol 1: Flammable aerosols, Hazard Category 1
Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

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