

MATERIAL SAFETY DATA SHEET FOR CANTESCO® D101-A AEROSOL

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : CANTESCO® DEVELOPER - STANDARD
PRODUCT IDENTIFIER : DEVELOPER - STANDARD
PRODUCT USE : DYE PENETRANT DEVELOPER
ITEM CODE(S) : D101-A
UPC BAR CODE(S) : 10370
FORMULA NAME : D101-A
FORMULA CODE : 0
MSDS CODE : 5
E-MAIL ADDRESS : MSDS@CANTESCO.COM
WEB ADDRESS : WWW.CANTESCO.COM
USA ADDRESS : KEMPER SYSTEM AMERICA, INC
1200 NORTH AMERICA DRIVE
WEST SENECA, NY 14224
PH (716) 693-8206
FAX (716) 693-8373
CANADIAN ADDRESS : KEMPER SYSTEM CANADA
13 - 5200 DIXIE ROAD
MISSISSAUGA, ON L4W 1E4
PH (905) 624-5463
FAX (905) 624-2840
PREPARED BY : QUALITY MANAGER
TELEPHONE : (905) 624-5463
EMERGENCY TELEPHONE : (613) 996-6666 (CANUTEC - Call collect)
PREPARATION DATE : MAY 25, 2010
OSHA REGULATORY STATUS : REGULATED
WHMIS CLASSIFICATION : A, B1, D2A

SECTION 2. COMPOSITION / INFORMATION ON INGREDIENTS

Table with 10 columns: ID, HAZARDOUS INGREDIENTS, CAS, OSHA PEL, ACGIH TLV, LD50SPECIES/ROUTE, LC50 SPECIES/ROUTE, %WT. Rows include Acetone, Liquified Petroleum Gas, Calcium Metasilicate, Hydrated Magnesium Silicate, and Amorphous Fumed Silica.

SECTION 3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
CONTENTS EXTREMELY FLAMMABLE AND UNDER PRESSURE. STORE BELOW 120°F (49°C), OUT OF SUNLIGHT AND AWAY FROM HEAT SOURCES. DO NOT PUNCTURE OR INCINERATE. AVOID CONTACT WITH SKIN AND EYES. VAPOR HARMFUL. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

EYE: Liquid or vapors may cause redness, burning, tearing, swelling and/or pain.
SKIN: Frequent or prolonged contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).
INGESTION: Due to being an aerosol, product does not lend itself to ingestion. Should ingestion occur, it may cause irritation to membranes of the mouth, throat and gastrointestinal tract, resulting in vomiting and/or cramps.
INHALATION: Prolonged or repeated overexposure is anesthetic. May cause irritation of the respiratory tract, or acute nervous system depression characterized by headache, dizziness, staggering gait, or confusion.
EFFECTS OF ACUTE EXPOSURE: N/Av
EFFECTS OF CHRONIC EXPOSURE: N/ Av
OTHER IMPORTANT HAZARDS: LEVEL 3 AEROSOL
SUGGESTED HMIS RATING: HEALTH | 2 | FLAMMABILITY | 4 | REACTIVITY | 0 | PERSONAL PROTECTION | B |



SECTION 4. FIRST AID MEASURES

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if symptoms persist or if unconscious.

INGESTION: Unlikely due to being in aerosol form. Should actual ingestion occur, do not induce vomiting! Drink a glass of water or milk to dilute. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

EYE CONTACT: Immediately flush with plenty of clear water for at least 15 minutes. Make sure to flush under the eyelids. Consult a physician for definitive treatment.

SKIN CONTACT: Remove with soap and water. Continue flushing with water for several minutes. Use skin cream to counter resulting dryness. Consult a physician if irritation continues or if large skin area is affected.

SECTION 5. FIRE FIGHTING MEASURES

CONDITIONS OF FLAMMABILITY: Heat, sparks, flame, red hot metal.

MEANS OF EXTINCTION: For warehouse and storage conditions, use NFPA Class B extinguishers (CO₂, dry chemical or universal aqueous film forming foam).

SPECIAL FIRE FIGHTING PROCEDURES: Use water spray to cool fire exposed aerosol containers for containers can rupture violently from heat developed pressure.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Contents extremely flammable and under pressure. In addition, when liquid or vapor comes into contact with flames or red hot metal, products of combustion will be created. Firemen should wear self-contained breathing apparatus.

FLASH POINT / DETERMINATION: Propellant < 0°F (<-18°C)

UPPER FLAMMABLE LIMIT: 9.5%

LOWER FLAMMABLE LIMIT: 1.8%

AUTO-IGNITION TEMPERATURE: N/Av

HAZARDOUS COMBUSTION PRODUCTS: N/Av

EXPLOSION DATA - SENSITIVITY TO MECHANICAL IMPACT: N/Av

EXPLOSION DATA - SENSITIVITY TO STATIC DISCHARGE: N/Av

SECTION 6. ACCIDENTAL RELEASE MEASURES

LEAK / SPILL RESPONSE: Product is an aerosol, therefore spills and leaks are unlikely. In case of rupture, released content should be contained as any other solvent spill. Spills from aerosol cans are unlikely and are generally of small volume. Large spills are therefore not normally considered a problem. In case of actual rupture, avoid breathing vapors and ventilate area well. Remove all sources of ignition and use non-sparking equipment. Soak up material with inert absorbent and place in safety containers for proper disposal.

SPECIAL INSTRUCTIONS: Aerosol products represent a limited hazard and will not spill or leak unless ruptured. In case of rupture contents are generally evacuated from the can rapidly. Area should be ventilated immediately and continuous ventilation provided until all fumes and vapors have been removed. Aerosol cans should never be incinerated or burned. See Section 13 for disposal considerations.

SECTION 7. HANDLING AND STORAGE

HANDLING PROCEDURES / EQUIPMENT: Avoid prolonged or repeated skin contact. Avoid breathing vapors.

STORAGE REQUIREMENTS: Store in area below 120°F (49°C). Do not incinerate (burn) containers. Assure can is in a secure place to prevent knocking over and accidental rupture. Always replace overcap when not in use. For store of pallet quantities, compliance with ANSI/NFPA 30B is recommended.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EYE PROTECTION: Safety glasses with side shields are recommended as a minimum for any type of industrial chemical handling. Where eye contact could occur, chemical splash proof goggles are recommended.

SKIN PROTECTION: For brief contact, no precautions other than clean body-covering clothing should be needed. When prolonged or repeated contact could occur, use protective clothing such as Sol-Vex® gloves or other clothing impervious to the ingredient listed in Section 2.

ENGINEERING CONTROLS: General ventilation (typically 10 air changes for hour) should be used. Ventilation rates should be matched to conditions. Local exhaust ventilation or an enclosed handling system, may be needed to control air contamination below that of the lowest TLV/PEL rated ingredient from Section 2.

EXPOSURE GUIDELINE LEVELS: Since this product is a mixture, an OSHA or ACGIH exposure value is not available. In determination of any exposure procedures, protection or testing use the lowest rated ingredient in Section 2.



SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point	> 133 F (56.1 C)	Melting/Freezing Point	> -140 F (-95.3 C)
Flash Point, Liquid Content	> 1 F (-17 C)	Flash Point, Propellant	-156 F (-104.4)
Explosive Limits	2.50% to 13.00%	Autoignition Temperature	869 F (465 C)
Flammability	Extremely Flammable Aerosol	Specific Gravity (H₂O = 1)	0.715 g/cc
Molecular Weight	Not Available	Weight	5.965 lbs/gal
Vapor Pressure	218.52 mm Hg (Liquid)	pH	Not Available
Vapor Density	2.00 g/cc Maximum	Evaporation Rate	> 5.7 (n-Butyl Acetate = 1.0)
Physical State	Liquid Under Pressure	Partition Coefficient	Not Available
Viscosity	Not Available	Refractive Index	Not Available
Percent Volatile	91% Wt (98% Vol) Max	VOC Content	2.169 lbs/gal (259.944 g/l)
Percent VOC	37% Wt (49% Vol) Max	HAP Content	None
Odor Threshold	Not Available	MIR Value	0.588 g O ₃ /g
Odor	Mild	Water Solubility	Emulsifies
Appearance	Clear liquid	Heat of Combustion	31.592 MJ/kg

SECTION 10. STABILITY AND REACTIVITY

STABILITY: Stable.

CONDITIONS TO AVOID: Heat, sparks, flame, red hot metal.

MATERIALS TO AVOID (INCOMPATIBILITIES): Strong oxidizing materials.

CONDITIONS OF REACTIVITY: N/Av

HAZARDOUS DECOMPOSITION BYPRODUCTS: Combustion will produce carbon monoxide, carbon Dioxide and nitrogen oxygen compounds..

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

ID	ORAL LD50	DERMAL LD50	INHALATION LC50
1	5800 mg/kg, rat	20 g/kg, rabbit	75 mg/m ³ /4 hr, rat
2	Not Available	Not Available	57.42% v/v, mice
3	Not Available	Not Available	Not Available
4	Not Available	Not Available	Not Available
5	5000 mg/kg, rat	2 g/kg rabbit/dermal	>0.139 mg/4h (rat)

ROUTES OF ENTRY: INHALATION[Y] EYE CONTACT[Y] SKIN CONTACT[Y] SKIN ABSORPTION[Y] INGESTION[N]

EXPOSURE LIMITS: Since this product is a mixture, an OSHA or ACGIH exposure value is not available. In determination of any exposure procedures, protection or testing use the lowest rated ingredient in Section 2.

IRRITANCY OF PRODUCT: N/Av

SENSITIZATION TO PRODUCT / MEDICAL CONDITIONS AGGRAVATED: N/Av

CARCINOGENICITY: None of the ingredients in this product are listed with IARC, NTP or OSHA as being carcinogenic.

TERATOGENICITY / MUTAGENICITY / REPRODUCTIVE TOXICITY: N/Av

TOXICOLOGICAL DATA: N/Av

SECTION 12. ECOLOGICAL INFORMATION

ENVIRONMENTAL EFFECTS: This product has not been tested for environmental effects.

IMPORTANT ENVIRONMENTAL CHARACTERISTICS: N/Av

AQUATIC TOXICITY: N/Av

SECTION 13. DISPOSAL CONSIDERATIONS

An aerosol container that does not contain a significant amount of liquid would meet the definition of scrap metal (40 CFR 261.1(c)(6), and would be exempt from RCRA regulation under 40 CFR 261.6(a)(3)(iv) if it is to be recycled. If containers are to be disposed of (not recycled) it must be managed under all applicable RCRA and state regulations.

SECTION 14. TRANSPORTATION INFORMATION

SPECIAL SHIPPING INFORMATION : N/Av

DOT HM-181 SHIPPING INFORMATION

PROPER SHIPPING NAME : Consumer Commodity
HAZARD CLASS OR DIVISION : ORM-D, ERG 126
UN NUMBER : 1950
PACKAGING GROUP : none
LABEL(S) REQUIRED : none
LEVEL : 1



TDG SHIPPING INFORMATION

TDG SHIPPING NAME : Aerosols, Limited Quantity
TDG CLASSIFICATION : 2.1
UN NUMBER : 1950
PACKING GROUP : none
LABEL(S) REQUIRED : none
NAERG : 126
EMERGENCY TELEPHONE NUMBER : (613) 996-6666



INTERNATIONAL TRANSPORT INFORMATION

PROPER SHIPPING NAME : Consumer Commodity
CLASS OR DIVISION : 9
SUBSIDIARY RISK : none
HAZARDOUS LABEL(S) : Miscellaneous
PACKAGING GROUP : 1900
UN OR ID NUMBER : ID8000

SECTION 15. REGULATORY INFORMATION

TOXIC SUBSTANCES CONTROL ACT (TSCA): The product on this MSDS, or all of its components, is listed under TSCA.

SARA TITLE III, SECTION 313: The following ingredients are subject to the reporting requirements of section 313 of Title III of the Superfund and Reauthorization Act of 1986 and 40 CFR Part 372: None.

CLEAN AIR ACT (CAA): The following ingredients appear on the List of Hazardous Air Pollutants (HAP – 42 USC 7412, Title I, Part A, p112): None

CLEAN WATER ACT (CWA):The following ingredients appear on the CWA List of Hazardous Substances (40 CFR 116.4): None

CALIFORNIA PROPOSITION 65: This product contains a chemical known in the state of California to cause cancer, birth defects or other reproductive harm. Benzene, Quartz

CANADIAN WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS): This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

DOMESTIC SUBSTANCES LIST (DSL): The product on this MSDS, or all of its components, is included in the DSL.

SECTION 16. OTHER INFORMATION

N/E	Not Established
N/Av	Not Available
N/Ap	Not Applicable
IARC	International Agency for Research on Cancer
ACGIH	American Conference of Governmental Industrial Hygienists
NIOSH	National Institute for Occupational Health and Safety
TLV-TWA	Threshold Limit Values, Time Weighted Average
NAERG	North American Emergency Response Guidebook
WHMIS	Workplace Hazardous Materials Information System

This MSDS format meets ANSI Z400.1-1998, OSHA 1910.1200 and WHMIS requirements. Cantesco Corporation 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 Cantesco Corporation. 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. Cantesco Corporation is an ISO 9001:2000 registered company.

ADDITIONAL INFORMATION REPLY FORM – PLEASE FAX OR EMAIL BACK

PLEASE ADD ME TO YOUR MSDS DATA BASE FOR PRODUCT UPDATES:

NAME		TITLE / DEPT	
FIRM			
ADDRESS			
CITY			
STATE / PROV		ZIP / POSTAL CODE	
PHONE		FAX	
EMAIL ADDRESS			

PLEASE SEND ME INFORMATION ON THE FOLLOWING CANTESCO® PRODUCTS:

WELDING CHEMICAL PRODUCTS	
AUTOMOTIVE, TRUCK & BUS FLEET WASH PRODUCTS	
CONSUMER CLEANING PRODUCTS	
INDUSTRIAL & INSTITUTIONAL CLEANERS	
HVAC CHEMICAL PRODUCTS	