



THE NEXT GENERATION:
QUESTIONS & ANSWERS
ABOUT CANTESCO®
PREMIUM ANTI-SPATTER
IN WELDING
APPLICATIONS

CANTESCO CORPORATION
WELDING PRODUCTS DIVISION
MISSISSAUGA, ONTARIO • BUFFALO, NEW YORK • ANTWERP, BELGIUM
(716) 693-8206 (UNITED STATES) • (905) 624-5463 (CANADA)
WWW.CANTESCO.COM
E-MAIL SALES@CANTESCO.COM

LAST REVISED 01/01/2000 ITEM NUMBER 529-662

WHAT YOU NEED IN AN EFFECTIVE ANTI-SPATTER

- to prevent spatter build up during welding process
- leave minimal residue after welding
- do not interfere with later surface treatment
- not flammable

WHY CHLORINATED SOLVENTS WERE EFFECTIVE ANTI-SPATTERS

Because chlorinated solvents did not possess a flash point (by ASTM flash point methods), had a fast evaporation rate and left minimal surface residue they were ideal under the above criteria for use as anti-spatter base materials.

WHAT IS THE PROBLEM WITH CHLORINATED SOLVENTS TODAY

There are two main problems with chlorinated solvents today; one dealing with environmental concerns, the other dealing with health and safety. Chlorinated solvents (such as 1,1,1-trichloroethane or methylene chloride) are considered to be ozone depleting and are in the process of being phased out of production.

For example, under the Montreal Protocol regulations which will "ultimately prohibit the manufacture and importation of "controlled" 1,1,1-trichloroethane" are being enacted.

Of direct health and safety importance to the individual using a chlorinated solvent based material is that hazardous phosgene gas is created when the chlorinated solvent becomes heated in the welding process

WHAT IS THE BEST ALTERNATIVE

The best alternative balances environmental, health and safety concerns with product performance requirements to arrive at an effective anti-spatter product that can replace traditional chlorinated solvent based spatters.

WHAT NEW ISSUES DOES THIS CHANGE CREATE

One of the new issues created in the move away from non-flammable chlorinated materials to water based anti-spatters is the type of propellant to use. Traditionally carbon dioxide (being non-flammable itself in this application) was the propellant of choice. However, carbon dioxide when mixed with water can lead to the creation of carbonic acid, obviously a situation to avoid when creating a safe product.

Secondly, some firms offer a "safe" alternative to hazardous anti-spatters by using ingredients in amounts that are below reportable limits as one way to offer a safe product. The end result is a poor quality product low in solids content and lacking the active ingredients required to provide effective surface coverage in welding applications.

TABLE I on the last page lists some of the ingredients found in anti-spatters which, if present in the anti-spatter in levels exceeding the reportable quantities, are considered hazardous.

HOW DOES CANTESCO® PREMIUM ANTI-SPATTER ADDRESS THESE CONCERNS

By developing a formula which is exempt from OSHA regulations while at the same time providing effective anti-spatter coverage. CANTESCO® PREMIUM ANTI-SPATTER prevents spatter build up in welding applications on all types of materials including steel, stainless steel and aluminum.

CANTESCO® PREMIUM ANTI-SPATTER is a water based product that does not contain chlorinated solvents or propellants in the formulation (does not contain methylene chloride, 1,1,1-trichloroethane, or ozone depleting CFC's). It does not create phosgene gas, even when heated to high temperatures or used on hot surfaces, that result when using chlorinated solvent based anti-spatter products.

CANTESCO® PREMIUM ANTI-SPATTER is non-toxic and exempt from OSHA requirements for hazardous chemical materials, eliminating concerns with respect to toxic or hazardous materials and does not contain any materials which are considered to be carcinogens, mutagens or teratogens.

It is also a stable mixture, free from suspended matter and sediment with no separation of components and does not require remixing prior to use.

WHAT ARE THE ENVIRONMENTAL BENEFITS

One immediate benefit in switching to CANTESCO® PREMIUM ANTI-SPATTER is that all the ingredients are biodegradable. In addition no harmful ozone depleting materials are used, either as propellants or as base materials, in this product.

HOW DOES CANTESCO® PREMIUM ANTI-SPATTER WORK

Where traditional anti-spatters have had a fast evaporation rate (due to the nature of chlorinated solvents) CANTESCO® PREMIUM ANTI-SPATTER is designed to weld through while wet. As a water based product with a high solids content it provides an effective protective coating on applied surfaces during welding applications.

WHY A HIGH SOLIDS CONTENT IS IMPORTANT

Solids content can be used as one means to determining the amount of material that will actually be providing the protective coating when applied to the surface. Lower quality anti-spatters tend to have a reduced solids content (as one means to be exempt from OSHA) while CANTESCO® PREMIUM ANTI-SPATTER has a higher solids content, ensuring more complete protection.

WHAT ABOUT A WATER BASED MATERIAL ON METAL SURFACES

CANTESCO® PREMIUM ANTI-SPATTER contains a rust inhibitor to address concerns regarding use of a water based product on metallic surfaces.

HOW IS THIS PRODUCT APPLIED

As with traditional anti-spatters it can be applied from either an aerosol can or directly from bulk containers on to the surface area to be protected.

WHAT ABOUT ELIMINATING AEROSOLS IN THE WORK PLACE

No problem, CANTESCO® PREMIUM ANTI-SPATTER is also available in a 16 oz non-aerosol pump spray. It comes ready to use and is in a reusable container for economical refilling from larger bulk containers. The pump allows for a more environmentally friendly product to be used in your plant area should you wish to eliminate aerosol cans altogether.

CAN CANTESCO® PREMIUM ANTI-SPATTER SAVE ME MONEY

Yes we can! CANTESCO® PREMIUM ANTI-SPATTER is available in sizes from 16 oz (aerosol and non-aerosol pump) and bulk containers for economical refill. In sizes from 1 gallon and up it is available in a concentrated form that can be diluted with water beginning in one to one ratio (which was not possible with traditional chlorinated solvent based anti-spatters). This further reduces your product cost!

HOW CANTESCO CORPORATION CAN HELP

- We have samples available for your evaluation free of charge. To receive a sample, fax our office with your application.
- MSDS sheets are available for all of Cantesco's products, whether they are regulated or not.

Let us recommend a CANTESCO® alternative to your current anti-spatter. Chances are we've already evaluated the product you currently use and can suggest benefits in switching to CANTESCO® PREMIUM ANTI-SPATTER!

TABLE I

SOME HAZARDOUS PRODUCTS COMMONLY USED IN ANTI-SPATTERS

CHEMICAL	CAS NUMBER	PEL (ppm)	HAZARDOUS DECOMPOSITION
Isohol (isopropyl alcohol)	67-63-0	400	carbon monoxide and dioxide
O-Phenylphenol (2-biphenylol)	90-43-7		acid smoke and irritating fumes
1,1,1-Trichloroethane	71-55-6	350	hydrogen chloride and amounts of phosgene and chlorine
Trichloroethylene	79-01-6	100	phosgene, carbon monoxide, hydrogen chloride
Methylene chloride	75-09-2	500	phosgene

NOTE: Check your current MSDS's against the above TABLE I for these hazardous materials

SHELF LIFE

The shelf life for CANTESCO® PREMIUM ANTI-SPATTER is a minimum of 12 months for aerosols and a maximum 12 months for bulk premium anti-spatters when kept in sealed containers and used as directed.

And to ensure your satisfaction all Cantesco aerosol products come with a 100% aerosol spray out guarantee.



ADDITIONAL INFORMATION

For additional information on each specific product request the TECHNICAL INFORMATION - TYPICAL ANALYSIS form for each material(s) you are considering using. For health and safety information request the specific material safety data sheet for each product(s) you are considering using.



WELDING PRODUCTS SELECTION GUIDE

PREMIUM ANTI-SPATTER – CONCENTRATE

ITEM NO	DESCRIPTION	SIZE	QTY PER BOX
ES-16-A (aerosol)	Premium quality anti-spatter compound which prevents spatter build up in welding applications of all types of materials including steel, stainless steel, aluminum. High solids content ensures an effective protective coating is placed on surface area. CANTESCO® PREMIUM ANTI-SPATTER has a neutral pH, contains rust inhibitor.	16 OZ	12
ES-16-P (pump)		16 OZ	12
ES-16-T (trigger)		16 OZ	12
ES-1G	A water based product that does not contain chlorinated solvents, CANTESCO® PREMIUM ANTI-SPATTER eliminates concerns regarding health and safety with respect to toxic materials and flammability.	1 GAL	4
ES-5G	In bulk form concentrate can be diluted with water starting in a one to one ratio. Does not contain solvents or silicone materials.	5 GAL	per pail
ES-DR		55 GAL	per drum

LEAK DETECTION COMPOUNDS • GAS LEAK DETECTORS • ZINC RICH SPRAY GALVS
 DYE PENETRANT INSPECTION • ANTI-SPATTERS • NOZZLE TIP DIP • WIRE LUBE PADS
 COOLING FLUIDS • STAINLESS STEEL PICKLING PASTE • ALUMINUM CLEANER