



**APPLICATION FOR MATERIALS LICENSE**

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**INSTRUCTIONS: SEE THE CURRENT VOLUMES OF THE NUREG-1556 TECHNICAL REPORT SERIES ("CONSOLIDATED GUIDANCE ABOUT MATERIALS LICENSES") FOR DETAILED INSTRUCTIONS FOR COMPLETING THIS FORM: <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1556/>. SEND TWO COPIES OF THE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.**

**APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:**

MATERIALS SAFETY LICENSING BRANCH  
 DIVISION OF MATERIAL SAFETY, STATE, TRIBAL AND RULEMAKING PROGRAMS  
 OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS  
 U.S. NUCLEAR REGULATORY COMMISSION  
 WASHINGTON, DC 20555-0001

**ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:**

**IF YOU ARE LOCATED IN:**

ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, NORTH CAROLINA, PENNSYLVANIA, PUERTO RICO, RHODE ISLAND, SOUTH CAROLINA, TENNESSEE, VERMONT, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA,

**SEND APPLICATIONS TO:**

LICENSING ASSISTANCE TEAM  
 DIVISION OF NUCLEAR MATERIALS SAFETY  
 U.S. NUCLEAR REGULATORY COMMISSION, REGION I  
 2100 RENAISSANCE BOULEVARD, SUITE 100  
 KING OF PRUSSIA, PA 19406-2713

**IF YOU ARE LOCATED IN:**

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:

MATERIALS LICENSING BRANCH  
 U.S. NUCLEAR REGULATORY COMMISSION, REGION III  
 2443 WARRENVILLE ROAD, SUITE 210  
 LISLE, IL 60532-4352

Br. 2  
 03038780

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS, LOUISIANA, MISSISSIPPI, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH, WASHINGTON, OR WYOMING,

**SEND APPLICATIONS TO:**

NUCLEAR MATERIALS LICENSING BRANCH  
 U.S. NUCLEAR REGULATORY COMMISSION, REGION IV  
 1600 E. LAMAR BOULEVARD  
 ARLINGTON, TX 78011-4511

**PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTIONS.**

**1. THIS IS AN APPLICATION FOR (Check appropriate item)**

- A. NEW LICENSE  
 B. AMENDMENT TO LICENSE NUMBER 06-35183-01  
 C. RENEWAL OF LICENSE NUMBER \_\_\_\_\_

**2. NAME AND MAILING ADDRESS OF APPLICANT (include ZIP code)**

Jay Gupta  
 Plus LLC  
 733 Summer Street, Suite 506  
 Stamford CT 06901

**3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED**

733 Summer Street, Suite 506  
 Stamford CT 06901

**4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION**

Jay Gupta

BUSINESS TELEPHONE NUMBER  
 (212) 380-1561

BUSINESS CELLULAR TELEPHONE NUMBER  
 (203) 524-6090

BUSINESS EMAIL ADDRESS  
[jay@plusbrandsllc.com](mailto:jay@plusbrandsllc.com)

SUBMIT ITEMS 5 THROUGH 11 ON 8-1/2 X 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

**5. RADIOACTIVE MATERIAL**

a. Element and mass number; b. chemical and/or physical form; and c. maximum amount which will be possessed at any one time.

**6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.**

**7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE.**

**8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.**

**9. FACILITIES AND EQUIPMENT.**

**10. RADIATION SAFETY PROGRAM.**

**11. WASTE MANAGEMENT.**

**12. LICENSE FEES (Fees required only for new applications, with few exceptions\*) (See 10 CFR 170 and Section 170.31)**

\*Amendments/Renewals that increase the scope of the existing license to a new or higher fee category will require a fee.

FEE CATEGORY	N/A	AMOUNT ENCLOSED \$	0.00
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**13. CERTIFICATION. (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT.**

THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, 36, 37, 39, AND 40, AND THAT ALL INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.

WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948 62 STAT. 749 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

**CERTIFYING OFFICER -- TYPED/PRINTED NAME AND TITLE**

Jay Gupta, Director

**SIGNATURE**

**DATE**

03/20/2017

**FOR NRC USE ONLY**

TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
APPROVED BY			\$	DATE	

594435  
 INFO/REG/MATERIALS-002

# SUPPLEMENTAL INFORMATION

## PLUS LLC

### APPLICATION FOR AMENDMENT OF RADIOACTIVE MATERIAL LICENSE

- ITEM 1.      THIS IS AN APPLICATION FOR AN AMENDMENT TO LICENSE 06-35183-01  
  
Amendment of a radioactive materials distribution license in accordance with 10 CFR 30, & 30.33.
- ITEM 2.      NAME AND ADDRESS OF APPLICANT  
  
Jay Gupta (Director – Plus, LLC)  
733 Summer Street  
Suite 506  
Stamford, CT 06901
- ITEM 3.      ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED  
  
733 Summer Street  
Suite 506  
Stamford, CT 06901
- ITEM 4.      NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION  
  
Jay Gupta  
Applicant Certifying Official  
Applicant Radiation Safety Officer  
733 Summer Street  
Suite 506  
Stamford, CT 06901  
203.524.6090  
[jay@plusbrandsllc.com](mailto:jay@plusbrandsllc.com)
- ITEM 5.      No change from existing license.
- ITEM 6.      No change from existing license.
- ITEM 7.      No change from existing license.
- ITEM 8.      No change from existing license.
- ITEM 9.      No change from existing license.
- ITEM 10.     No change from existing license.
- ITEM 11.     No change from existing license.
- ITEM 12.     LICENSE FEES  
  
This is an amendment that does not increase the scope of the existing license to a new or higher fee category.

**SUPPLEMENTAL INFORMATION**

**ATTACHMENT A**

**DETAILS ON NEW MODELS & SERIES TO BE ADDED  
TO THE LICENSES**

## SUPPLEMENTAL INFORMATION

### DESCRIPTION

The wristwatches distributed by Plus LLC contain radioactive tritium for the purpose of creating 'glow-in-the-dark' watch face. The gaseous tritium is contained in small vials of borosilicate glass. This type of glass is known for its high resistance to thermal shock and stress. The vials/tubes are placed strategically along the watch face and hands. The radioactive tritium emits a low energy Beta particle that reacts with a coating of zinc-sulfide on the interior of the glass vial causing to fluoresce (glow). The low energy Beta particles (tritium) are contained entirely within the enclosed glass vial.

Watches offered for sale by Plus LLC contain trivalight®, watch light - Gas tritium Light Sources (GTLS), manufactured by 'mb-microtec®. All GTLS with one of its dimension smaller than 1.0mm are classed as "watch lights". The GTLS are filled with hydrogen-3 (tritium) and coated on the inner wall with a thin layer of zinc-sulfide powder which serves to create the different colors and 'glow' of the GTLS.

The watches distributed by Plus LLC utilize the following GTLS.

Mb-Microtec Model: T5648-1

Maximum number per watch: 1

Dimensions: 0.50mm diameter X 1.3mm length

Activity: 0.75 mCi / 0.027 GBq

Mb-Microtec Model: T6080-1

Maximum number per watch: 12

Dimensions: 0.50mm diameter X 1.95mm length

Activity: 1.2 mCi / 0.045 GBq

Mb-Microtec Model: T6042-1

Maximum number per watch: 1

Dimensions: 0.65mm diameter X 4.1mm length

Activity: 2.2 mCi / 0.08 GBq

Mb-Microtec Model: T6043-1

Maximum number per watch: 1

Dimensions: 0.65mm diameter X 6.6mm length

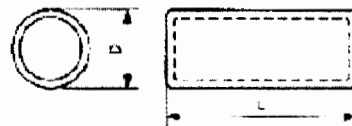
Activity: 3.6 mCi / 0.135 GBq

Mb-Microtec Model: T6044-1

Maximum number per watch: 1

Dimensions: 0.50mm diameter X 1.6mm length

Activity: 0.96 mCi / 0.035 GBq



Each watch, identified by a model number belonging to a 'Model Series', contains a maximum of 16 sources with total activity not exceeding 25 mCi per watch.

26 Series are currently covered by the license. These are **0200, 1800, 1860, 1920, 1940, 3000, 3050, 3080, 3150, 3180, 3950, 4200, 4240, 5020, 5120, 5240, 6250, 6400, 6500, 7050, 7250, 8800, 8820, 8830, 8840, 9270.**

This amendment requests 3 additional Series to be included in the license. A detailed reference table for these Series is provided on pages 4.

## SUPPLEMENTAL INFORMATION

WATCH MODEL SERIES	SEALED SOURCE MODEL NUMBER	TYPE	MAXIMUM ACTIVITY	CONSTRUCTION & DESIGN REFERENCE
<b>1500</b>	T5648-1	Bezel	0.75 mCi	Attachment B Pages 17-22
	T6080-1	Hour markers (12)	1.2 mCi X 12 = 14.4 mCi	
	T6042-1	Hour hand (2)	2.2 mCi X 2 = 4.4 mCi	
	T6043-1	Minute hand	3.6 mCi	
	T6044-1	Second hand	0.96 mCi	
		<b>Total</b>	<b>24.11 mCi</b>	
<b>4220</b>	T5648-1	Bezel	0.75 mCi	Attachment B Pages 23-28
	T6080-1	Hour markers (12)	1.2 mCi X 12 = 14.4 mCi	
	T6042-1	Hour hand	2.2 mCi	
	T6043-1	Minute hand	3.6 mCi	
	T6044-1	Second hand	0.96 mCi	
		<b>Total</b>	<b>21.91 mCi</b>	
<b>9460</b>	T6080-1	Hour markers (12)	1.2 mCi X 12 = 14.4 mCi	Attachment B Pages 29-34
	T6042-1	Hour hand	2.2 mCi	
	T6043-1	Minute hand	3.6 mCi	
		<b>Total</b>	<b>20.20 mCi</b>	

### DESCRIPTION (continued)

A cross-reference list has been provided on page 14 which relates each watch model number that will be distributed to the NRC registration Model Series number. In addition, diagrams detailing the design and configuration of each Model Series (specifying positioning and placement of GTLS) have been provided within 'Attachment B: Technical Diagrams' in pages 15-33. Plus LLC may distribute additional watch models provided the model meets the design specifications approved by NRC for the registered Model Series and is consistent with these diagrams. The expected useful life of the watches is 10 years, considering the half-life of tritium is 12.3 years.

### DISTRIBUTION METHODS

The business model involves frequent shipment of small quantities of watches containing less than 25 mCi of tritium. The specific purpose of the radioactive material is to provide a luminous dial watch for sale to individual purchasers for their own personal use. These users are exempt from licensing requirements in accordance with 10 CFR 30.19 'Self-luminous products containing tritium, krypton-85, or promethium-147'. Distribution consists of Amazon taking the orders, but all stock and all shipments originate from 733 Summer Street, Stamford, CT. This is done in order to comply with the requirement for a receipt QA program which takes place upon receipt of watches to the United States from overseas shipping/manufacturing. The QA inspections also take place at this physical address.

## **SUPPLEMENTAL INFORMATION**

### **RADIATION LEVEL AND METHOD OF MEASUREMENT**

On contact reading with watch face using a Ludlum Model 12 and a 44-9 Geiger Mueller probe indicates no detectable above background in counts per minute (cpm). This is the expected result based on activity, energy and type of radiation emitted by the isotope contained (Tritium).

Tritium is a pure Beta emitter. The maximum energy of the emitted radiation is a low energy particle 18 kev. The average energy is about 1/3 of this amount - 5.7 kev. This type of radiation and low energy is not sufficient to exit the glass vial that contains the hydrogen gas and the watch face. The radioactive hydrogen contained in the watch is very difficult to detect using normal radiation detection instruments. Verification that the radioisotope is present and contained is best done visually by verification the 'glow' is present at all prescribed locations along the watch face.

Oak Ridge National Laboratory completed a study to determine dose estimates for a number of different workers and exposure scenarios (NUREG/CR-0215 ORNL/NUREG/TM-150, "Estimates of Potential Radiation Doses from Wristwatches Containing Tritium Gas") prepared for the US Nuclear Regulatory Commission under Interagency Agreement DOE 40-543-75. The study assumed that individual watches may contain up to 200 mCi of tritium. This is eight times the total activity contained in any watch distributed by Plus LLC. Dose estimates related to failure modes associated with Plus LLC watches could be calculated by reducing the corresponding exposures in the study by a factor of eight.

### **CONTAINMENT OR BINDING OF BYPRODUCT MATERIAL**

Mb-Microtec has been manufacturing GTLS devices for watches since 1969. They manufacture the GTLS for a number of different watch companies including their own brand Traser that are currently marketed and distributed in the United States market. They are capable of manufacturing these barely visible glass tubes and filling them with tritium due to their special know-how for working with glass cylinders of this size. Therefore, MB-Microtec is claimed to be the sole supplier to any and all watch manufacturers using tritium gas tubes for their watches.

The final step in the manufacturing process of the GTLS at the Mb-Microtec lab involves the workers cutting long strips of filled glass tubes down individually, using a small torch which melts the glass and, as such, immediately seals the tube as well, locking the gas inside. While it is difficult to detect any leakage from the tubes using standard radiological measuring instruments due to the extremely low energy of the emitted Beta particle, the tubes can best be inspected visually for leakage. If the tube 'glows' the tritium is contained inside. The GTLS are sealed by the melted glass ends at either side and contain the gaseous tritium inside. The GTLS are glued to the watch itself using a special adhesive manufactured by Loctite. This glue is specially formulated for the characteristic of bonding to glass. The Technical Data Sheet detailing the specifications related to the glue itself is included on pages 7-8. Further details on the construction, material, quality, and safety of the watch is provided in the next paragraph under 'Quality Control and Testing'.

## SUPPLEMENTAL INFORMATION

### QUALITY CONTROL AND TESTING

As the watch is intended to be worn on the wrist, it is not normally expected to encounter any conditions more severe than those to which a human arm is subjected to such as temperature, shock, chemical etc. The watch is manufactured and marketed as an extremely durable and rugged piece of equipment, subjected to quality tests. The main housing is constructed of sturdy steel backing plates and a 1.2mm thick cover made of mineral glass in most models and sapphire glass in some models. Sapphire and mineral glass are both tested by dropping a 2.25 ounce (approx. 63 grams) steel ball on a representative crystal from varying heights until the crystal breaks and the total amount of energy needed to break the glass can be calculated. The mineral glass absorbs  $1600 \text{ to } 2100 \times 10^{-4}$  Newton-Meters, while sapphire glass absorbs  $800 \text{ to } 1800 \times 10^{-4}$  Newton-Meters. The glass is break resistant, measuring very high at 9 on the Mohs scale (hardness), a rating measure of the relative hardness of various materials. Underneath the glass cover, the GTLS are attached using the glue described on pages 9-10 and contained between these two sturdy components. The watches are tested to remain waterproof to a depth of 100-200 meters (145-290 psi). They are subject to a QA verification program that includes dropping the watch from a height of three feet onto a steel plate. No cracking of face, damage to watch operating functions, bending of hands or pointers, or dislodgment of GTLS is acceptable in this testing process. Additional tests include:

- Thermal shocks resistance (5 times: 2 hours at 158°F / water immersion at 41°F)
- Shock resistance (pendulum testing machine)
- Acceleration resistance (from 250 to 5500m/s<sup>2</sup>)
- Bracelet vibration test - 50'000 vibration cycles

Plus LLC inspects each batch of watches in accordance with submitted Quality Assurance plan to verify:

- All GTLS are in assigned location (glued securely).
- All GTLS exhibit no leakage (GTLS glow brightly indicating that gaseous tritium is contained).

# SUPPLEMENTAL INFORMATION

Technical Data Sheet

# LOCTITE

## Product 350

August 2003

### PRODUCT DESCRIPTION

LOCTITE<sup>®</sup> Adhesive/Sealant 350 provides the following product characteristics:

<b>Technology</b>	Acrylic
<b>Chemical Type</b>	Modified acrylic
<b>Appearance (uncured)</b>	Transparent dark amber liquid <sup>1</sup>
<b>Components</b>	One component - requires no mixing
<b>Viscosity</b>	Medium
<b>Cure</b>	Ultraviolet (UV) Light
<b>Application</b>	Bonding, Encapsulating or Sealing
<b>Operating Temperature</b>	-54°C to +150°C

Product 350 is a medium viscosity adhesive that forms tough, flexible bonds with excellent adhesion to glass, metal and certain thermoplastic substrates. Strength retention is excellent when exposed to water or humidity. The product has a long open working time, making it applicable for screen printing operations.

### TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 25°C	1.01
Flash Point (TCC), °C	>93
Viscosity @ 25°C, mPa·s:	
Brookfield RVT:	
Spindle 5 @ 20 rpm	3,500 to 6,000 <sup>2</sup>

### TYPICAL CURING PERFORMANCE

Cure rate and ultimate depth of cure depend on light intensity, spectral distribution of the light source, exposure time and light transmittance of the substrate through which the light must pass.

#### Fixture Time

UV Fixture Time vs source intensity	
UV Fixture Time, seconds	
UV Light Source Intensities:	
6 mW/cm <sup>2</sup> @ 365 nm	15
12 mW/cm <sup>2</sup> @ 365 nm	10
100 mW/cm <sup>2</sup> @ 365 nm	5

#### UV Fixture Time on glass microscope slides, 0 gap

UV Fixture Time, seconds	
UV Light Source Intensities:	
6 mW/cm <sup>2</sup> @ 365 nm	≤20 <sup>3</sup>

#### Full Cure Time (approximate)

UV Cure Time vs source intensity	
UV Light Source Intensities	
6 mW/cm <sup>2</sup> @ 365 nm	90
12 mW/cm <sup>2</sup> @ 365 nm	60
100 mW/cm <sup>2</sup> @ 365 nm	30

#### Note:

Surface can be cured tack free with 60 mW/cm<sup>2</sup> or greater intensity.

### PERFORMANCE OF CURED MATERIAL

#### Adhesive Properties

Shear Strength, ASTM D 1151 N/mm <sup>2</sup> :	
ABS to glass:	
RT control	4.97
Aged for 30 days in 95% RH at 35°C	4.48
PVC to glass:	
RT control	5.34
Aged for 30 days in 95% RH at 35°C	4.97
Polycarbonate to glass:	
RT control	5.38
Aged for 30 days in 95% RH at 35°C	5.10
Polystyrene to glass:	
RT control	1.38
Aged for 30 days in 95% RH at 35°C	1.62
Acrylic to glass:	
RT control	5.07
Aged for 30 days in 95% RH at 35°C	2.48
Polyester glass to glass:	
RT control	5.28
Aged for 30 days in 95% RH at 35°C	4.28
Epoxy glass to glass:	
RT control	4.83
Aged for 30 days in 95% RH at 35°C	4.32

Cured @ 6 mW/cm<sup>2</sup> @ 365nm for 3 minutes.

#### Adhesive Properties

Torsional Shear Strength N.m:	
Aluminum Hex Button to Glass	≥1.00 <sup>4</sup>

### GENERAL INFORMATION

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

For safe handling information on this product, consult the Material Safety Data Sheet (MSDS).

Where aqueous washing systems are used to clean the surfaces before bonding, it is important to check for compatibility of the washing solution with the adhesive. In some cases these aqueous washes can affect the cure and performance of the adhesive.

This product is not normally recommended for the use on plastics (particularly thermoplastic materials where stress cracking of the plastic could result). Users are recommended to confirm compatibility of the product with such substrates.

#### Directions for use

For best strength and aging properties, bonding surfaces should be clean and dry. When cured under low intensity light, excess adhesive will remain uncured and can be removed with a chlorinated solvent wipe.

#### Coverage:

@ 0.127mm bondline - 78.7cm <sup>2</sup> /ml
@ 0.254mm bondline - 39.4cm <sup>2</sup> /ml

 **Technologies**



# SUPPLEMENTAL INFORMATION

TDS Product 350 August 2003

## Loctite Material Specification™

LMS dated June 1, 1999. Test reports for each batch are available for the indicated properties. LMS test reports include selected QC test parameters considered appropriate to specifications for customer use. Additionally, comprehensive controls are in place to assure product quality and consistency. Special customer specification requirements may be coordinated through Henkel Loctite Quality.

## Storage

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

**Products shall be maintained at temperatures between 8°C to 28°C unless otherwise labeled, or specified. Storage, at temperatures below 8°C, or greater than 28°C, is not recommended. Temperatures below 8°C and above 28°C can adversely affect product properties**

Material removed from containers may be contaminated during use. Do not return product to the original container. Loctite cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

## Conversions

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$

$\text{K}:\text{m} \times 25.4 = \text{M}:\text{mil}$

$\text{mm}^2 \times 0.039 = \text{inches}$

$\text{mPas} = \text{cP}$

$\text{N}:\text{mm}^2 \times 145 = \text{psi}$

$\text{N} \times 0.225 = \text{lbs}$

## Note

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof, in light of the foregoing. **Henkel Loctite Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Loctite Corporation's products. Henkel Loctite Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Loctite Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

## Trademark usage

LOCTITE is a Trademark of Henkel Loctite

Reference 0.0

Henkel Loctite Americas  
-860.571.5100

Henkel Loctite Europe  
+49.89.9268.0

Henkel Loctite Asia Pacific  
+952.2233.0000

For the most direct access to local sales and technical support visit: [www.loctite.com](http://www.loctite.com)

## SUPPLEMENTAL INFORMATION

### LABELING

As required in the regulation 10 CFR 32.14.b.6 -

The proposed method of labeling or marking each unit, except timepieces or hands or dials containing tritium or promethium-147, and its container with the identification of the manufacturer or initial transferor of the product and the byproduct material in the product;

(Underline emphasis added)

Plus LLC label each watch delivered to end consumer with:

1. Contact information for Plus LLC
2. Isotope (Byproduct Material) included in the package
3. Total activity of the included isotope

An illustration of the proposed label is shown below.

*Distributed by:*  
**Plus LLC**  
733 Summer St, Stamford CT 06901  
(888) 232-6613  
Product contains Tritium (Hydrogen 3 – 25mCi)

Pictures of the positioning and placement of the label are shown on page 10.

The brand of the manufacturer is also noted on the watch face. In addition, each watch is marked on the face as "T25" indicating that each timepiece is less than the 25 mCi trigger point associated with 10CFR 30.15



Note: T 25 indicates that the watch contains Tritium 'T', less than 25 millicuries.

# SUPPLEMENTAL INFORMATION

Pictures illustrating labeling on the container

LABELING



## SUPPLEMENTAL INFORMATION

### CONSTRUCTION AND DESIGN

The assembly of each watch, as indicated in the following illustration, remains consistent. This is being shown to explain the different components of the watch. Detailed technical diagrams have been submitted to the Material Safety Licensing Branch in DC.

Crystal →

16 tritium micro-gas tubes in glass housing:  
*One on each of the 12 hour markers, one each on the hour hand, minute hand, second hand, and one on the bezel*

Hands →

Crown →

Dial →

Movement →

Bezel →

Case →

Gasket →

Case-back →

Lugs →

Strap/bracelet →

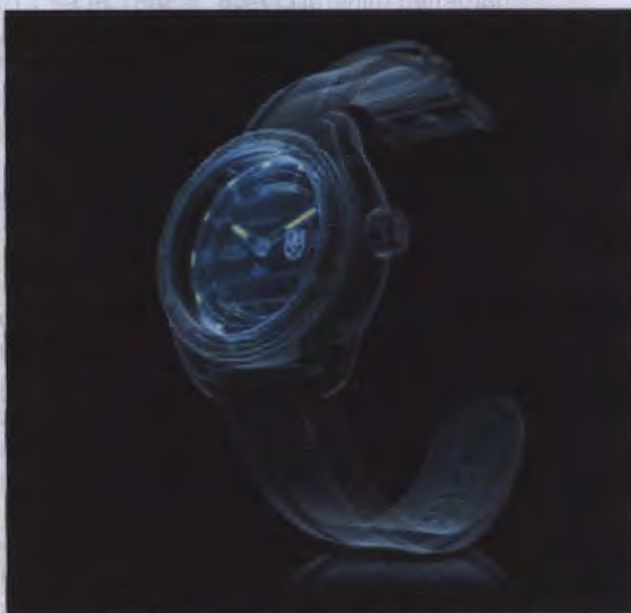


To the right is a 3-dimensional design of a watch →

The variations within each Model Series come from –

- > Changes in material or color of the strap/bracelet
- > Changes in material or color of the case
- > Changes in color and pattern printed on the dial-face
- > Changes in movement

The table on page 14 provides a cross-reference of the specific watch models within each of the new Model Series to be added to the license.



## SUPPLEMENTAL INFORMATION

### Watch Models within Series currently included in the license

(7 new Models introduced within Series 1920, 1940, 3050, 5020, 8800 as indicated)

MODEL SERIES	CONSTRUCTION	WATCH MODEL	VARIATION	NEW ADDITIONS
<b>0200</b>	Carbon reinforced polycarbonate case with hardened mineral crystal	0201.SL	White markings	
		0201.BO	Black markings	
		0215.SL	Red markings	
<b>4200</b>	Stainless steel case with sapphire glass	4221	Polyurethane strap	
		4221.CW	Nylon strap	
<b>6250</b>	Stainless steel case with sapphire glass	6251	Leather strap with black threading	
		6251.BO	Leather strap with black case	
		6252	Steel bracelet	
		6252.BO	Black steel bracelet and case	
		6265	Leather strap with red threading	
<b>6400</b>	Stainless steel case with sapphire glass	6402	White markings	
		6402.BO	Black markings	
<b>7050</b>	Polycarbonate case	7051	White markings	
		7051.BO	Black markings	
		7065	Pink markings	
		7057.WO	Silver markings	
<b>8820</b>	Polycarbonate case with sapphire glass	8821.KM	Kilometers scale, black strap	
		8822.MI	Miles scale, black strap	
		8823.KM	Kilometers scale, grey strap	
		8824.MI	Miles scale, grey strap	
		8825.KM	Kilometers scale, green strap	
		8826.MI	Miles scale, green strap	
<b>3080</b>	Polycarbonate case with hardened mineral crystal	3081	White markings	Typo of '3038' from 11/15/2017 amendment is being corrected to '3083'
		3081.BO	Black markings	
		3082	White sub-dial	
		3082.BO	Black sub-dial	
		3083	Blue markings	
<b>3050</b>	Polycarbonate case with hardened mineral crystal	3089	Orange markings	3053.SOC.SET and 3059.SET are 2 other variations added to this series
		3051	White markings	
		3051.BO	Black markings	
		3052	White sub-dial	
		3052.BO	Black sub-dial	
		3053	Blue markings	
		3053.SOC.SET	Blue markings, special box	
		3057.WO	White case	
		3059	Orange markings	
		3059.SET	Orange markings, extra strap	
<b>3000</b>	Polycarbonate case with hardened mineral crystal	3067	Green markings	
		3001	White markings	
		3001.BO	Black markings	
<b>1940</b>	Steel case with sapphire glass	3003	Blue markings	1942.BOB and 1944.M are 2 other variations added to this series
		1941	White threading on strap	
		1941.BO	Black threading on strap	
		1942	Steel bracelet	
		1942.BOB	Black on black steel bracelet	
		1943	Grey leather strap	
		1945	Black dial with brown leather strap	
1947	Brown dial with brown leather strap			
		1944	Blue dial with brown leather strap	

## SUPPLEMENTAL INFORMATION

<b>1920</b>	Steel case with sapphire glass	1944.M	Blue dial with steel bracelet	1922.BOB is one more variation added to this series
		1949	Black dial with dark brown strap	
		1921	White markings	
		1921.BO	Black markings	
		1922	Gunmetal strap	
		1922.BOB	Black on black, metal bracelet	
		1923	Grey leather strap	
		1925	Brown leather strap	
		1927	Brown markings	
		1924	Blue dial with brown leather strap	
1929	Black dial with dark brown strap			
<b>1800</b>	Stainless steel case with sapphire glass	1801	Brown leather strap	
		1801.BO	Black leather strap	
<b>1860</b>	Stainless steel case with sapphire glass	1860.BO	Black leather strap	
<b>3150</b>	Stainless steel case with hardened mineral crystal	3151	Rubber strap	
		3152	Stainless steel strap	
		3152.BO	Black stainless steel strap	
<b>3180</b>	Stainless steel case with hardened mineral crystal	3181	Rubber strap	
		3182	Stainless steel strap	
		3182.BO	Black stainless steel strap	
<b>3950</b>	Polycarbonate case with hardened mineral crystal	3955SET	Nylon strap and compass	
<b>4240</b>	Stainless steel case with sapphire glass	4241	Rubber strap	
		4242	Stainless steel strap	
<b>5020</b>	Polycarbonate case with hardened mineral crystal	5021	Black dial with black bezel	5021.GN is one more variation added to this series
		5021.GN	Rubber strap	
		5023	Blue dial with black bezel	
		5027	Black dial with white bezel	
<b>5120</b>	Stainless steel case with sapphire glass	5121	Black bezel	
		5127	Silver bezel	
<b>5240</b>	Titanium case with sapphire glass	5241	Analog-digital movement	
<b>6500</b>	Stainless steel case with sapphire glass	6502	Silver bezel with silver bracelet	
		6502.BO	Black bezel with black bracelet	
<b>7250</b>	Stainless steel case with sapphire glass	7251	Silver bezel with leather strap	
		7251.BO	Black bezel with leather strap	
		7252	Silver bezel with steel strap	
		7252.BO	Black bezel with steel strap	
		7253	Blue markings with leather strap	
		7257	White dial with white leather strap	
		7258	White dial with steel strap	
<b>8800</b>	Polycarbonate case with hardened mineral crystal	8801	Black dial with grey markings	8801 is another variation added to this series
		8802	Grey dial with grey markings	
		8815	Black dial with red markings	
<b>8830</b>	Polycarbonate case with sapphire glass	8831	Kilometers scale, black strap	
		8832	Miles scale, black strap	
<b>8840</b>	Polycarbonate case with sapphire glass	8841	Kilometers scale, black strap	
		8842	Miles scale, black strap	
<b>9270</b>	Titanium case with sapphire glass	9278	Black leather strap with red accents	

## SUPPLEMENTAL INFORMATION

### Cross-Reference Table of Watch Models in the New Series to be Added to the License

<b>MODEL SERIES</b>	<b>CONSTRUCTION</b>	<b>WATCH MODEL</b>	<b>VARIATION</b>	<b>DIAGRAMS</b>
<b>1500</b>	Stainless steel case with sapphire glass	1513	Blue dial	Submitted to DC
<b>4220</b>	Polycarbonate case with hardened mineral crystal	4223.SOC.SET	Blue dial	Submitted to DC
<b>9460</b>	Stainless steel case with sapphire glass	9461	Black leather strap	Submitted to DC



**ACKNOWLEDGEMENT - RECEIPT OF CORRESPONDENCE**

<b>Name and Address of Applicant and/or Licensee</b>  Plus, LLC ATTN: Jay Gupta, Director 733 Summer Street Suite 506 Stamford, CT 06901	<b>Date</b> April 5, 2017
	<b>License Number(s)</b> 06-35183-01
	<b>Mail Control Number(s)</b> 594435
	<b>Licensing and/or Technical Reviewer or Branch</b> Commercial, Industrial, R&D, & Academic Branch (Branch 2)

This is to acknowledge receipt of your:  Letter and/or  Application Dated: 03/20/2017

The initial processing, which included an administrative review, has been performed.

Amendment       Termination       New License       Renewal

There were no administrative omissions identified during our initial review.

This is to acknowledge receipt of your application for renewal of the material(s) license identified above. Your application is deemed timely filed, and accordingly, the license will not expire until final action has been taken by this office.

Your application for a new NRC license did not include your taxpayer identification number. Please complete and submit NRC Form 531, Request for Taxpayer Identification Number, located at the following link: <http://www.nrc.gov/reading-rm/doc-collections/forms/nrc531.pdf>  
Follow the instructions on the form for submission.

The following administrative omissions have been identified:

Your application has been assigned the above listed MAIL CONTROL NUMBER. When calling to inquire about this action, please refer to this control number. Your application has been forwarded to a technical reviewer. Please note that the technical review, which is normally completed within 180 days for a renewal application (90 days for all other requests), may identify additional omissions or require additional information. If you have any questions concerning the processing of your application, our contact information is listed below:

**Region I**  
**U. S. Nuclear Regulatory Commission**  
**Division of Nuclear Materials Safety**  
**2100 Renaissance Boulevard, Suite 100**  
**King of Prussia, PA 19406-2713**  
**(610) 337-5260, (610) 337-5313,**  
**(610) 337-5398, or (610) 337-5239**