Public Works and Government Services Canada | Travaux publics et Services gouvernementaux Canada

RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:
RFI Authority

LETTER OF INTEREST
LETTRE D'INTÉRÊT

Title - Sujet Temperate Weather Gloves	
Solicitation No. - N° de l'invitation W8476-206207/B	**Date** 2022-01-24
Client Reference No. - N° de référence du client W8476-206207	**GETS Ref. No. - N° de réf. de SEAG** PW-$$PR-767-80889
File No. - N° de dossier pr767.W8476-206207	**CCC No./N° CCC - FMS No./N° VME**

Solicitation Closes - L'invitation prend fin
at - à 02:00 PM Eastern Standard Time EST
on - le 2022-02-15 Heure Normale du l'Est HNE

F.O.B. - F.A.B.
Plant-Usine: ☐ **Destination:** ☐ **Other-Autre:** ☐

Address Enquiries to: - Adresser toutes questions à: Abdillahi, Mahade	**Buyer Id - Id de l'acheteur** pr767
Telephone No. - N° de téléphone (343) 550-1643 ( )	**FAX No. - N° de FAX** ( ) -

Destination - of Goods, Services, and Construction:
Destination - des biens, services et construction:

See Herein
Voir ci-inclus

Comments - Commentaires

Instructions: See Herein

Instructions: Voir aux présentes

Vendor/Firm Name and Address
Raison sociale et adresse du fournisseur/de l'entrepreneur

Delivery Required - Livraison exigée See Herein – Voir ci-inclus	**Delivery Offered - Livraison proposée**

Vendor/Firm Name and Address
Raison sociale et adresse du fournisseur/de l'entrepreneur

Telephone No. - N°de téléphone
Facsimile No. - N° de télécopieur

Name and title of person authorized to sign on behalf of Vendor/Firm (type or print)
Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)

Signature **Date**

Issuing Office - Bureau de distribution

Clothing and Textiles Division / Division des vêtements et des textiles
L'Esplanade Laurier,
East Tower 7th Floor
Tour est 7e étage
140 O'Connor, rue O'Connor,
Ottawa
Ontario
K1 A 0R5

Canada

REQUEST FOR INFORMATION
FOR
GLOVES, TEMPERATE WEATHER, COMBAT, FIRE RETARDANT, BLACK, ROYAL CANADIAN NAVY (RCN)

1. SCOPE

1.1. **Purpose**. This Request For Information (RFI) serves to request industry feedback by the Department of National Defence's (DND) Directorate of Soldier Systems Program Management (DSSPM) about the revised technical specifications intended to support the competitive procurement of the Royal Canadian Navy's fire retardant (FR), temperate weather combat glove (NSN 8415-20-009-9913 A/A).

1.2. The recent cancellation of Public Services and Procurement Canada (PSPC) competitive solicitation W8476-206207/A enabled DND to confirm the derived requirements for the glove (design, construction, and materials) from the RCN's Statement of Operational Requirement (SOR).

1.3. DND intends on supporting the re-tendering for quantities of the FR temperate weather combat glove with the revised technical data package. As such, this RFI seeks to request industry feedback for the following:

1.3.1. To inform industry of changes to the requirements;
1.3.2. To verify whether the new requirements align with industry capabilities; and
1.3.3. To invite comments and concerns from the hand wear end item suppliers or manufacturers, and related materials manufacturing industry.

1.4. **Terminology**. For the purposes of this RFI, the following acronyms are defined as follows.

AATCC	American Association of Textile Chemists and Colorists
AMS	Aerospace Material Specification
ASTM	American Society for Testing and Materials
BSI	British Standards Institution
CADPAT	Canadian Disruptive Pattern
CAF	Canadian Armed Forces
CGSB	Canadian General Standards Board
DND	Department of National Defence
DLP	Directorate of Land Procurement
DSSPM	Directorate Soldier Systems Program Management
DSCP	Defence Supply Centre Philadelphia
FR	Fire Retardant
ISO	International Organization for Standardization
NATO	North Atlantic Treaty Organization
NICE	Naval Improved Clothing and Equipment
NOC	Naval Operational Clothing

NSN	NATO Stock Number
PSPC	Public Services and Procurement Canada
RCN	Royal Canadian Navy
RFI	Request For Information
RFP	Request for Proposal
SAE	Society of Automotive Engineers
SOR	Statement of Operational Requirements
TA	Technical Authority
TCG	Temperate Combat Glove
TDP	Technical Data Package
TW	Temperate Woodlands
TWG	Temperate Weather Glove

2. **NATURE OF THE REQUEST FOR INFORMATION (RFI) AND CONSULTATIONS**.

2.1.1. This RFI is neither a call for tender nor a Request for Proposal (RFP) and no agreement or contract will be entered into based on this RFI. The issuance of this RFI is not to be construed in any way as a commitment by Canada nor as an authorization to potential Respondents to undertake any work that could be charged to Canada. This RFI must not be considered as a commitment to issue a subsequent solicitation or award contract(s) for the requirements described herein.

2.1.2. Participation in this RFI is encouraged, but is not mandatory. There will be no short-listing of potential firms for the purposes of undertaking any future work as a result of this RFI. Similarly, participation in this RFI is not a condition or prerequisite for the participation in any potential subsequent RFP, or other type of solicitation. This RFI is simply intended to solicit information from industry with respect to the contents of this RFI.

2.2. **Consultations.**

2.2.1. The consultation will use a phased approach:

a. **Phase I** - Written concerns or suggestions for improvements; and
b. **Phase II** - Follow-up Activity.

Detailed information for both phases is included in paragraph 4.

2.2.1.1. Suppliers that manufacture gloves and/or related materials, whether or not meeting the requirements of Annex A or Annex B are requested to submit a written response if they have concerns or suggestions for improvements.

2.2.1.2. Suppliers are requested to submit their written response to the Delivery Address identified (paragraph 4.2.5) by the closing date of the Request For Information. If submitting physical examples, request a delivery address through the RFI Authority (paragraph 2.2.1.4).

2.2.1.3. **Modifications to the RFI**. Modifications to this RFI may occur and will be advertised on the buyandsell.gc.ca. Canada requests Respondents to visit buyandsell.gc.ca regularly to check for any amendments or updates.

2.2.1.4. **RFI Authority**. The PSPC is responsible for the management of the RFI process. The PSPC contact and RFI Authority is:

Mahade Abdillahi
Public Works and Government Services Canada
Acquisitions Branch
Commercial and Consumer Products Directorate (CCPD)
Clothing & Textiles Division

Telephone : 343-550-1643
E-mail address: Mahade.abdillahi@tpsgc-pwgsc.gc.ca

3. BACKGROUND.

3.1. As part of the RCN's Naval Improved Clothing and Equipment (NICE) Project, the document outlining the operational requirements for the Temperate Weather Glove (TWG) included, but is not limited to, the following:

a. The TWG must provide naval personnel with adequate protection, unimpeded movement, and basic wear comfort to achieve optimum effectiveness under adverse climatic and operational conditions worldwide;

b. The TWG must be suitable for wear on land and on-board ship in:

   i. Temperate weather with ambient temperatures +5 to +35 degrees Celsius and relative humidity of 78% to 43%;
   ii. Marine tropical weather with ambient temperatures +29 to +48 degrees Celsius, relative humidity of 61% to 21%, and a direct solar radiation (estimated maximum 1120 W/m^2);
   iii. Marine temperate weather with ambient temperatures +25.5 to +35 degrees Celsius, relative humidity of 61% to 21%, and a direct solar radiation (estimated maximum 1080 W/m^2); and
   iv. Mild cold weather with ambient temperatures -6 to -19 degrees Celsius, relative humidity tending to saturation, and negligible direct solar radiation.

c. Due to the heightened risk of injury due to fire/battle damage onboard ship and in general naval operations, the TWG must, as part of the Naval Operational Clothing (NOC) ensemble, be made of materials that are flame resistant and "no melt / no drip";

d. As a general purpose working glove, TWG must provide a degree of hand protection but is not intended to address all potential shipboard threats;

e. The TWG must be designed to provide good grip, durability, dexterity, and tactility as to perform shipboard tasks without any significant degradation;

f. The TWG must be a single layer (without linings, insulation, or water moisture vapour permeable inter lining) construction;

g. The TWG must have an anti FOD (foreign object debris) design and fabricated with non-static generating materials;

h. The TWG must be made of breathable materials that also provide water resistance. The TWG *should* provide protection from moisture penetration for at least 2 hours of continuous wear;

i. The TWG air-drying time must not exceed eight (8) hours in all in-theatre operating conditions. The fit and performance of the glove must not be degraded by shrinkage or stiffness due to cycles of wetness and drying.

3.2. As part of the development of the technical document package (consisting of, but not limited to, end item and supporting specifications, drawings, paper patterns, etc.), reviews of the SOR resulted in the identification of derived requirements for the glove (design, construction, and materials) to support the competitive solicitation W8476-206207/A. Questions submitted by potential Bidders identified the need to discuss with the RCN and re-examine their requirements resulting in the request to PSPC to cancel the solicitation. DSSPM 2 has revised the end item specification and supporting leather specification to better reflect the requirement but requires industry feedback to confirm the requirements' achievability.

4. REQUEST FOR INFORMATION

4.1. **RFI Contents**. This RFI contains the following attached documents:

- Annex A DSSPM 2-3-87-9913 (Specification For Gloves, Temperate Weather, Combat, Royal Canadian Navy NSN 8415-20-009-9913 A/A)
- Annex B DSSPM 2-3-80-TWG FR (Specification For Leather, Goatskin, Aniline, Chrome Tanned, Fire Resistant, Gloving)
- Annex C Questions For Industry

4.2. **Phase I. Written Response**.

4.2.1. Suppliers that manufacture gloves and/or related materials are encouraged to submit a written response to this RFI.

4.2.2. Respondents that produce gloves and/or related materials whether or not meeting the meeting the requirements of Annex A or Annex B are requested to submit a written response if they have concerns or suggestions for improvements. Annex C contains a list of questions posed to Glove Manufacturers and Leather Tanneries / Leather Suppliers.

4.2.3. Suppliers are requested to submit their written response to the Delivery Address identified (paragraph 4.2.5) by the closing date of the RFI.

4.2.4. **Content**. Responses should include the following:

a. Respondent's name, contact information, and return address;
b. The RFI number and closing date;
c. A written statement containing any comments, feedback, or questions regarding the revised technical specifications;
d. If applicable, literature (such as, but not limited to, a manufacturers product sheet or a specification sheet) with general information about the proposed solution(s); and
e. If the proposed solution falls outside the requirements of Annex A or Annex B, include a written statement explaining which requirements cannot be met and how it affects the proposed solution.

4.2.5. **Delivery Address**. Responses are not considered bids; however, responses shall be sent to PSPC at the following email address:

Mahade.abdillahi@tpsgc-pwgsc.gc.ca

4.2.6. **Phase II – Follow-Up Activity**.

4.2.6.1. Canada may, in its discretion, contact any respondents to follow up with additional questions or for clarification of any aspect of a response in writing.

4.2.6.2. The purpose of the follow up activities between Canada and individual Respondents is to hear from glove design and manufacturing companies and leather tanneries and/or suppliers capable of manufacturing the TWG.

4.2.7. **General Information.**

4.2.7.1. **Use**. Responses, discussions, and product samples will not be formally evaluated, however, they may be used by DND to develop a future technical data package. All responses and samples received by the RFI closing date will be reviewed by DND. DND may, at its discretion, review responses and samples received after the RFI closing date. Written responses to this RFI will not be returned. Product samples may be returned, at DND's discretion.

4.2.7.2. **Costs**. Canada will not reimburse any respondent for expenses incurred responding to this RFI.

4.2.7.3. **Parameters**. Respondents are reminded that this RFI is not a Request for Proposal. In that regard, respondents should feel free to include any comments or concerns with their responses. Canada reserves the right to seek clarification from a Respondent on information provided in response to this RFI in writing.

4.2.7.4. **Confidentiality**. The confidentiality of each Respondent will be maintained. Respondents are requested to clearly identify portions of their response that are proprietary. Items that are identified as proprietary will be treated as such except where Canada determines that the item is not of a proprietary nature.

4.2.7.5. **Enquiries**. Enquiries regarding this RFI shall be directed to the RFI Authority. Enquiries received after 15 days before the closing date of this RFI may not be answered. Because this is not a bid solicitation, the Government of Canada will not necessarily respond to all enquiries in writing, nor circulate all answers to Industry. However, in the event that answers are circulated, Enquirers should clearly identify portions of their questions that are proprietary in nature. Canada may edit the questions or request that the Enquirer do so, so that the proprietary nature of the question is eliminated, and the enquiry can be circulated to Industry.

RDIMS No. 6229798 (v4)

Annex A

DSSPM 2-3-87-9913
2022-01-24
Supercedes all previous versions of /
Remplace toutes les versions antérieures de
DSSPM 2-3-87-9913

National Défense
Defence nationale

NOTICE

This documentation has been reviewed by the technical authority and does not contain controlled goods. Disclosure notices and handling instructions originally received with the document must continue to apply.

AVIS

Cette documentation a été révisée par l'autorité technique et ne contient pas de marchandises contrôlées. Les avis de divulgation et les instructions de manutention reçues originalement doivent continuer de s'appliquer.

SPECIFICATION
FOR
GLOVES, TEMPERATE WEATHER, COMBAT, FIRE RETARDANT, BLACK, ROYAL CANADIAN NAVY

NSN 8415-20-009-9913 A/A

OPI/BPR: DSSPM 2-3

Canada

SPECIFICATION
FOR
GLOVES, TEMPERATE WEATHER, COMBAT, FIRE RETARDANT, BLACK ROYAL CANADIAN NAVY
NSN 8415-20-009-9913 A/A

1 SCOPE

1.1 **Scope.** This specification covers the material, design, construction and inspection requirements for a black, all-leather, temperate weather glove for use by the Royal Canadian Navy for operations.

1.2 **Intended Use.**

1.2.1 The Temperate Weather Glove (TWG) will be used by the Royal Canadian Navy (RCN) to provide enhanced environmental protection to the hands and wrists while maintaining the dexterity to operate complex and compact equipment and communications devices.

1.2.2 The TWG will be primarily worn in temperate weather climactic conditions within the ambient temperature range of +5° Celsius to +35 ° Celsius and relative humidity of 78% to 43%. On-board ship, it could also be worn in marine tropical weather with ambient temperatures +29 to +48 degrees Celsius, relative humidity of 61% to 21%, and a direct solar radiation (estimated maximum 1120 W/m^2) and marine temperate weather with ambient temperatures +25.5 to +35 degrees Celsius, relative humidity of 61% to 21%, and a direct solar radiation (estimated maximum 1080 W/m^2).

2 APPLICABLE DOCUMENTS

2.1 **Government documents.** The following documents form part of this Specification to the extent specified herein. Unless otherwise specified, the issue or amendment of documents effective for a particular contract must be that in effect on the publication date of this specification.

D-80-001-055/SF-001 Label, Clothing and Equipment

CFTPO-GENERAL General Canadian Forces Transportation Packaging Order

2.2 **Other Publications.** The following documents form part of the specification to the extent specified herein. Effective date must be that in effect on the publication date of this specification.

Canadian Standards Board, Sales Unit
11 Rue Laurier
Place Portage Phase III
Gatineau, Quebec KIA 1G6
Tel: (819) 956-0425 or 1-800-665-2472 (Canada only)
Email: ncr.cgsb-ongc@tpsgc-pwgsc.gc.ca

CAN/CGSB-4.2 Textile Test Methods

Defence Supply Centre Philadelphia
Clothing and Textiles Directorate
700 Robbins Avenue
Philadelphia, PA 19111-5096
Attention: DSCP-COCT

A-A-50195B Thread, Aramid

A-A-55217B Thread Aramid, Spun Staple

ISO International Standards
International Organization for Standardization
ISO Central Secretariat
Chemin de Blandonnet 8
CP 401
1214 Vernier, Geneva
Switzerland
Telephone: +41 22 749 01 11
E-mail: central@iso.org
Website: http://www.iso.org/iso/home.html

or

Standards Council of Canada
600-55 Metcalfe Street
Ottawa, Ontario
K1P 6L5 Canada
Telephone: 613-238-3222
Email: info@scc.ca
Website: https://www.scc.ca/en

ISO 4915:1991 Textiles — Stitch Types — Classification and Terminology

ISO 4916:1991 Textiles — Seam Types — Classification and Terminology

Society of Automotive Engineers (SAE) International
E-mail: customersales@sae.org
Tel: +1 888 875 3976 (U.S. and Canada)
Website: https://www.sae.org/standards

AMS-STD-595 Colours Used In Government Procurement

2.3 **DSSPM Documents.** The following documents form part of this Specification to the extent specified herein.

DSSPM 2-3-80-TCG FR Specification For Leather, Goatskin, Aniline, Chrome Tanned, Fire Resistant, Gloving

2.4 **Master Sealed Patterns.**

DSSPM 393-05* Gloves, Temperate Combat (For shell design and construction only)

DSSPM 388-17 Leather, Goatskin, Aniline, Chrome Tanned, Fire Resistant, Gloving

*Note: For this contract, the following deviations apply to DSSPM 393-05:

a) Delete the adjustable wrist tensioning strap and buckle assembly;

b) Delete the colour requirement for the leather to be CADPAT TW. Amend the colour requirement for the leather must be black in accordance with DSSPM 2-3-87-9913 para 3.4.1.3; and

c) Add the requirement for a wrist suppression via a length of elastic tape sewn to the flesh side of the leather at the back of the wrist in accordance with DSSPM 2-3-87-9913 para 3.4.3.

2.5 **Paper Patterns and Tooling.**

2.5.1 **Paper Patterns.** Paper patterns for the manufacture of the Gloves, Temperate Weather, Combat, RCN will be provided by the Government as Style Code GTWRCN33 and must be used to manufacture the gloves. To support the solicitation, paper patterns for the Medium size will be issued. The remaining sizes will be forwarded upon contract award.

2.5.2 **Tooling.** Tooling used to manufacture the gloves must be the responsibility of the Contractor and must reflect the paper patterns.

2.6 **Figures.** Figures in this specification are provided as a guide to the design and dimensions of the Gloves, Temperate Weather, Combat, RCN.

Figure 1 Gloves, Temperate Weather, Combat, RCN - Front and Back View

Figure 2 Gloves, Temperate Weather, Combat, RCN – Measurement References

2.7 **Order of Precedence**

2.7.1 In the event of discrepancies between the documents referenced herein and the contents of this specification, the contents of this specification must be considered a superseding requirement.

2.7.2 In the event of inconsistency within the specification, the Contracting Authority must be contacted for clarification.

2.7.3 In the event of inconsistency in contract documents such as contract, specification, and sealed patterns, the order of precedence must be contract, specification, and sealed patterns.

2.7.4 Nothing in this document supersedes applicable laws and regulations, unless a specific exemption has been obtained.

3 REQUIREMENTS

3.1 **Sealed Samples**. A sealed sample will be supplied to the successful bidder. The sealed sample must constitute the standard in regard to any properties not specified in the Specification.

3.2 **Design.** The Gloves, Temperate Weather, Combat, RCN must incorporate the following design features:

a. Black water resistant goatskin leather glove body with flame resistant treatment;
b. Inseam sewn finger fourchettes;
c. Leather reinforced palm and thumb; and
d. Interior tensioning elastic band at front and back of wrist.

3.3 **Size Range.** The gloves are available in eight sizes (from X-Small to Large-Long) in accordance with the paper patterns (Style Code GTWRCN33), the Scale of Measurements (Table III), and the accompanying drawings (Figure 1 and 2).

3.4 **Materials.**

3.4.1 **Leather - Glove Body, Palm Reinforcement, and Fourchettes.**

3.4.1.1 The glove body (trank) pieces, palm reinforcement piece, and fourchettes must be made from drum dyed, aniline goatskin leather measuring 2.0 to 2-1/2 ounces (0.90 mm +/-0.1 mm) goatskin leather that is flame resistant, water resistant, breathable, stain and oil resistant with dry soft ability.

3.4.1.2 The leather must meet the requirements in DSSPM 2-3-80-TCG FR and DSSPM 388-17.

3.4.1.3 The colour must be Black 37038 in accordance with AMS-STD-595.

3.4.2 **Thread.**

3.4.2.1 The thread for all sewing operations must be one of the following:

a. Continuous multifilament aramid yarn, size 40 Tex in accordance with A-A-50195B; or

b. Spun staple, flame resistant (FR) high temperature aramid thread, size 45 Tex, three (3) ply in accordance Type II (high performance) with A-A-55217B dated March 29, 2011.

3.4.2.2 Thread colour must be black.

3.4.3 **Elastic Tape.**

3.4.3.1 The wrist elastic suppression must be made of two (2) pieces of elastic tape in accordance with Table I.

TABLE I: REQUIREMENTS FOR THE ELASTIC TAPE

Properties	Requirements
Weight	145 m/kg +/- 5%
Width	10 mm +/- 1 mm
Cover yarn	Cotton, 2 ply/ 20 cotton count
Core	10 ends #40 rubber, white
Picks/Centimeter	29 +/- 5 %
Stretch	150 % +/- 10 %
Colour	Natural

3.4.3.2 Two pieces of elastic must be cut 105 mm (+/- 5 mm) long for the medium size glove.

3.4.3.3 For the remaining sizes, the elastic must be sized proportionately and cut proportionately.

3.4.4 **Marking and Care Label.**

3.4.4.1 The following marking and care information must be indelibly and legibly printed on either Type I label (Label, Woven, Coated and Printed) or Type II label (Label, Spun-Bonded Olefin, Printed) of D-80-001-055/SF-001. The colour must be white. The label must be stitched into back hem. The label must contain the following information (see example):

a. NATO Stock Number (NSN) as required for each size. NSN's will be designated in the contract by item and size;
b. The size (twice the size of all other lettering);
c. Contractor's identification of CA number;
d. Contract Number;
e. Month and year of manufacture (MM/YYYY);
f. The following care instructions:
DO NOT MACHINE WASH OR DRY/ NE PAS LAVER OU SECHER A LA MACHINE.

Example:

3.4.5 **Hang tags.** No brand or product names may be permanently attached to the gloves in any way. Hang tags that are easily removable without damage to the product, with brand or product names/information/ care instructions may be acceptable at no cost to the Crown, provided that approval for text and use has been granted by the Design Authority.

3.5 **Cutting**

3.5.1 Glove pieces must be cut using Government supplied paper patterns.

3.5.2 The Contactor is responsible for any changes that may be required for make-up allowance to suit production methods, but the design, grade or requirements specified herein must not be changed unless specified by the Technical Authority.

3.5.3 A tranking procedure must be employed for cutting the leather for the glove.

3.5.4 The pieces must be die cut from leather that has been fully and properly stretched lengthwise and widthwise.

3.5.5 A skilled leather cutter must perform appropriate leather preparation prior to cutting to avoid undue lengthening of the leather, and to ensure sufficient stretch across the palm.

3.6 **Sewing.**

3.6.1 Seam and stitch types must be in accordance with ISO 4915 and ISO 4916.

3.6.2 The needle size must be the minimum size compatible with the sewing thread.

3.6.3 Thread tension must be adjusted to ensure balanced and correctly formed stitches. Skips, puckers or stitching malfunctions are not acceptable.

3.6.4 The beginning and ends of lock stitched seams and stitching and any breaks in stitching, must be securely and neatly backstitched with 3 to 4 stitches when there is no other method used to secure the end of the seam.

3.6.5 Seams formed must be smooth and regular with even seam allowances.

3.6.6 Seam Type 1.01.01 (inseam) must be 2.0 mm to 4.0 mm wide.

3.6.7 Seam type 2.01.01 (pique seam) must be overlapped 7.0 mm (tolerance +/- 1.0 mm) and lock stitched on the right side 2.0 mm from edge.

3.6.8 Thread ends must be trimmed and removed.

3.6.9 Lock stitching, when specified, must be Type 301 with a minimum of 10 and a maximum of 15 stitches per 2.5 cm.

3.6.10 Zig-zag stitching when specified must be done using a three stitch zig-zag, stitch Type 321, with a minimum of 10 and a maximum of 15 stitches per 2.5 cm.

3.7 **Construction Details.**

3.7.1 When constructing the gloves, leather component pieces must be colour matched for each glove.

3.7.2 The fourchettes must be lock stitched together at the base of each finger using seam type 1.01.01.

3.7.3 Fourchettes must be lock stitched to the fingers of the back of the glove using Seam Type 2.01.01 (pique seam).

3.7.4 The lower thumb piece must be lock stitched to the palm using Seam Type 1.01.01 (inseam).

3.7.5 The palm and thumb reinforcement must be lock stitched to the palm and upper thumb with a double row of lock stitching set 1.5 to 2 mm apart using seam type 1.02.01.

3.7.6 The first row of stitching must be 1.5 to 2 mm from the edge.

3.7.7 The lower thumb piece must be lock stitched to the upper thumb piece using seam type 1.01.01 (inseam).

3.7.8 The remaining finger seams and the closing seams must be lock stitched using seam type 1.01.01 (inseam).

3.7.9 The bottom edge of the glove must be turned under to form a hem 8 mm wide (+/- 2 mm).

3.7.10 The label must be positioned horizontally inside the fold of the hem at the notches.

3.7.11 The hem must be topstitched 5 mm (+/- 1 mm) from the raw edge, seam type 6.02.01.

3.8 **Wrist Suppression Elastic**.

3.8.1 Two pieces of elastic must be cut 105 mm (+/- 5 mm) long for the medium size glove.

3.8.2 For the remaining sizes, the elastic must be sized proportionately and cut proportionately.

3.8.3 The tape must be positioned in the inside of the glove across the full width of the wrist on the palm and back side as indicated by the notches on the patterns. The elastic tape must be positioned in the inside of the glove, extend 3.0 mm beyond the leather to be sewn into the closing seam, and sewn on the flesh side of the leather under tension using a zig-zag stitch.

3.9 **Finishing**.

3.9.1 The gloves must be paired by colour and size.

3.10 **Dimensions.** Dimensions of finished gloves shall be in accordance with the scale of measurements (see Table III and Figure 2).

4 QUALITY ASSURANCE

4.1 Unless specified in the contract, the contractor is responsible for ensuring that the performance of all inspections and materials conform to the requirements of this Specification.

4.2 The Government reserves the right to perform any verification or testing deemed necessary to confirm that the material and services conform to prescribed requirements. The

contractor is responsible for ensuring that all material or services submitted to the Government for acceptance comply with all requirements of the contract.

5 PACKAGING

5.1 Packaging and packing. Unless otherwise specified, packaging and packing as well as delivery must be in accordance with the terms of the contract.

5.2 The TWG must be individually packaged in accordance with CFPTO-GENERAL.

5.3 The abbreviated nomenclature for the label on the bags must be as follows:

Temperate Combat Gloves – Navy / Gants Climat Tempère – Marine

6 DEFINITIONS

6.1 **Technical Authority.** The Technical Authority is the Government agency responsible for the technical aspects of the design and changes to the design. Unless otherwise specified in the contract, the Technical Authority is the Director, Soldier System Program Management (DSSPM 2).

6.2 **Design Authority.** The Design Authority is the Government agency responsible for aspects of the design and changes to the design. Unless otherwise specified in the contract, the Technical Authority is the Director, Soldier System Program Management (DSSPM 2).

6.3 **Master Sealed Sample.** The master sealed sample is the only authorized prototype of the item to be produced and is held by the Government.

6.4 **Sealed Sample.** The sealed sample is a duplicate of the master sealed sample and is available to the manufacturer to be used as a guide in production.

6.5 **Quality Assurance Authority.** The quality assurance Authority is the Government agency responsible for ensuring that the material and services supplied by the contractor perform to the specified requirements. The Quality Assurance Authority will be specified in the contract.

6.6 **Safety Health and Environmental Concerns.** The production of a product to this specification, or the evaluation of a product to this specification, may require the use of materials and/or equipment that could be hazardous. This specification does not purport to address all safety, health and environmental concerns, if any associated with its use. It is the responsibility of the user of this specification to establish appropriate safety, health and environmental practices and to determine the applicability of regulatory limitations prior to use.

TABLE II – NATO STOCK NUMBERS AND SIZES

TC Glove Size	NATO Stock Number (NSN)
A/A	**8415-20-009-9913**
X-Small	8415-20-009-6805
X-Small Long	8415-20-009-6806
Small	8415-20-009-6807
Small Long	8415-20-009-8284
Medium	8415-20-009-6808
Medium Long	8415-20-009-6809
Large	8415-20-009-6810
Large Long	8415-20-009-6811
Special Size	8415-20-010-0556

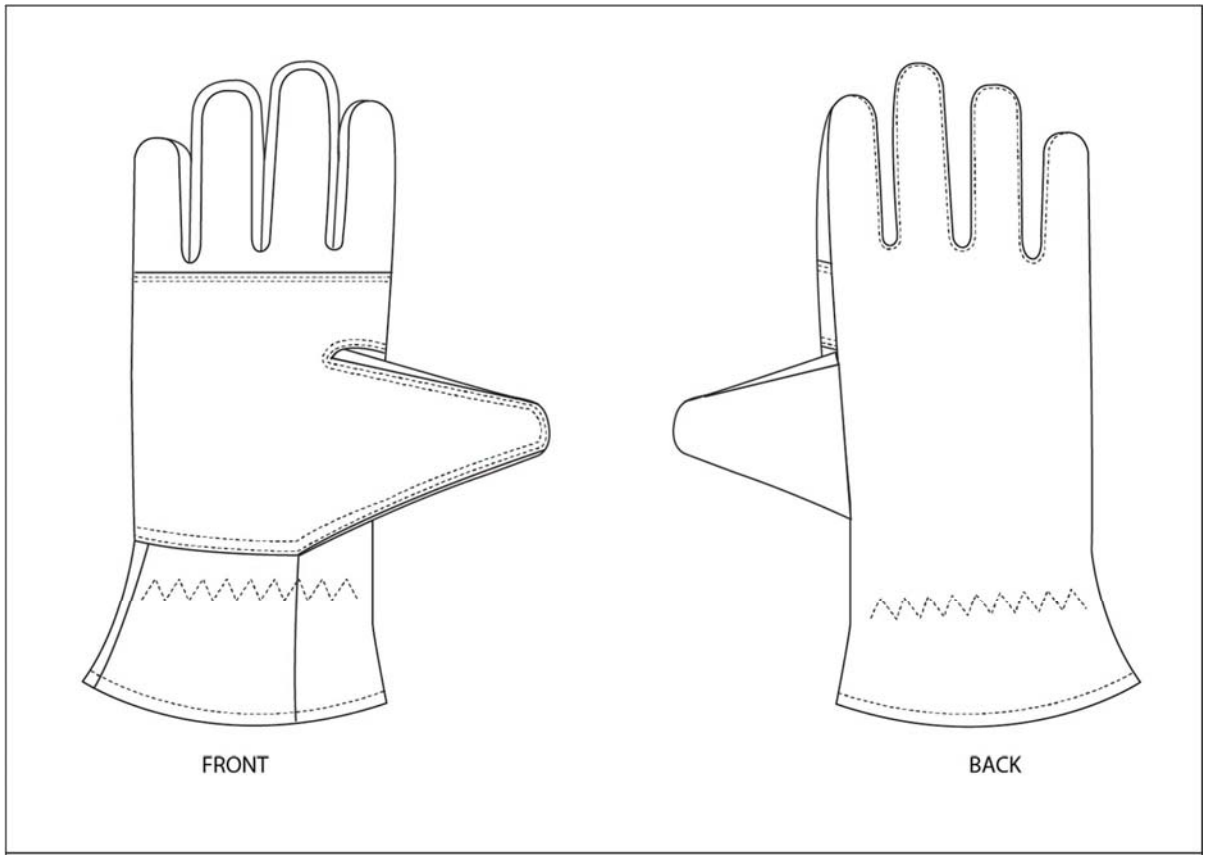

FIGURE 1: GLOVE, TEMPERATE WEATHER, COMBAT, RCN - FRONT AND BACK VIEW

TABLE III – SCALE OF MEASUREMENTS – GLOVE, TEMPERATE WEATHER, COMBAT, RCN

Reference on Figure 2	Description	X-Small	X-Small Long	Small	Small-Long	Medium	Medium-Long	Large	Large-Long	Tolerance
A	Index Finger Length	61	68	65	73	70	78	76	83	+ / - 2.5
B	Finished Glove Length	235	247	244	259	257	270	271	279	+ / - 3.0
C	Finished Palm Width	96	96	103	103	110	110	117	117	+/ - 3.0

Measurements are in millimeters.

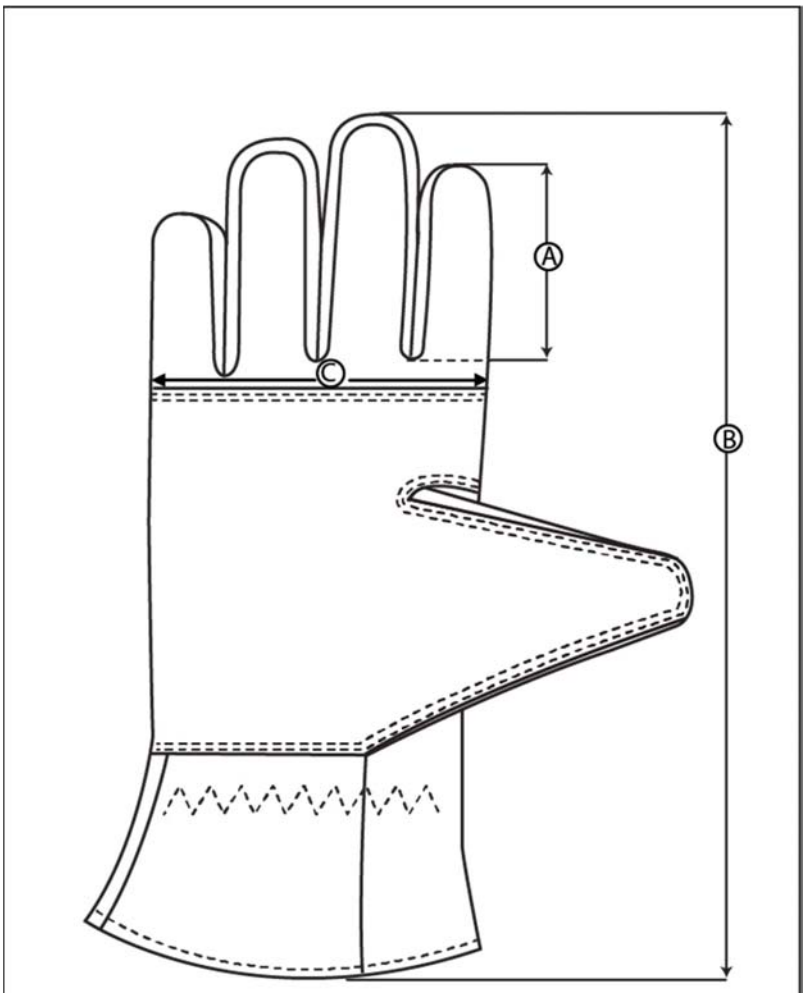

FIGURE 2 - GLOVES, TEMPERATE WEATHER, COMBAT, RCN - MEASUREMENT REFERENCES

RDIMS / SGDDI No. 6229913 (v4)

ANNEX B / ANNEXE B

DSSPM 2-3-80-TCG FR
2022-01-24
Supercedes all previous versions of /
Remplace toutes les versions antérieures de
DSSPM 2-3-80-TCG FR

National Defence / Défense nationale

NOTICE

This document has been examined by the Technical Authority for content and confirmed that it has no references to controlled goods.

AVIS

Le présent document a été examiné par l'autorité technique et ne vise pas de marchandises contrôlées. Les avis de divulgation et les instructions de manutention reçues originalement doivent continuer de s'appliquer.

SPECIFICATION FOR LEATHER, GOATSKIN, ANILINE, CHROME TANNED, FIRE RETARDANT, GLOVING

SPÉCIFICATION POUR CUIR DE CHÈVRE, ANILINE, TANNÉ AU CHROME, IGNIFUGÉ, POUR GANTS

OPI/BPR: DSSPM 2-3 / DAPES 2-3

Canada

**SPECIFICATION
FOR
LEATHER, GOATSKIN, ANILINE, CHROME TANNED, FIRE RETARDANT, GLOVING**

1 **SCOPE.** The following specification details the technical requirements for a water and oil resistant, dry-soft, fire retardant, goatskin leather and are mandatory requirements in their entirety.

2 **APPICABLE DOCUMENTS**

2.1 The following documents or portions thereof are referenced within this specification. Documents referenced within the documents cited herein must not be applicable unless the extent is specifically delineated in this specification. The edition in effect on the date of the Request for Proposal is the applicable edition unless otherwise specified.

Government Documents. Not applicable.

Other Publications. The documents listed below are not provided by the Government and may be purchased from the source shown:

CGSB Sales Centre
Canadian General Standards Board
Ottawa, Canada
K1A 1G6
Phone: (819)- 956-0425 or 1-800-665-CGSB (Canada only)
Fax: (819)-956-5644
E-mail address: ncr.cgsb-ongc@pwgsc.gc.ca
Internet Address: https://www.tpsgc-pwgsc.gc.ca/ongc-cgsb/index-eng.html

CAN/CGSB-4.2 Textile Test Methods

ASTM Standards
ASTM International
PO Box C700
100 Barr Harbor Dr
West Conshohocken, PA
19428-2959 USA
Telephone: 610-832-9585
Email: service@astm.org
Website: www.astm.org

**SPÉCIFICATION
POUR
CUIR DE PEAU DE CHÈVRE, ANILINE, TANNÉ AU CHROME, IGNIFUGE, POUR GANTS**

1 **OBJET.** La spécification suivante détaillent les exigences techniques pour un cuir de chèvre cuir de chèvre sec et souple résistant à l'eau et à l'huile, présentent un caractère ignifuge, et constituent des exigences obligatoires dans leur intégralité.

2 **DOCUMENTS APPLICABLES**

2.1 Les documents ou parties de ceux-ci suivants sont référencés dans cette spécification. Documents référencés dans les documents cités ici ne sont pas applicables, sauf si la mesure est spécifiquement délimitée dans cette spécification. L'édition en vigueur à la date de la demande de propositions est la version applicable, sauf indication contraire.

Documents du gouvernement. N'est pas applicable.

Autre Publications. Les publications suivantes font partie intégrante de la présente spécification dans la mesure prescrite par cette dernière. La version en vigueur à la date d'appel d'offres s'applique. La source de diffusion est celle qui est indiquée.

Normes de l'ONGC
Office des normes générales du Canada
Place du Portage III, 6B1
11, rue Laurier
Gatineau (Québec)
K1A 1G6 Canada
Téléphone: 819-956-0425 ou 1-800-665-2472
Courriel: ncr.cgsb-ongc@tpsgc-pwgsc.gc.ca
Site Internet: http://www.tpsgc-pwgsc.gc.ca/ongc-cgsb/index-fra.html

CAN/CGSB-4.2 Textile Test Methods

ASTM Standards
ASTM International
PO Box C700
100 Barr Harbor Dr
West Conshohocken, PA
19428-2959 États-Unis
Téléphone: 610-832-9585
Courriel: service@astm.org
Site Internet: www.astm.org

D 1813 Standard Test Method for Measuring Thickness of Leather Test Specimens

D 1814 Standard Test Method for Measuring Thickness of Leather Units

D6015 Standard Test Method for Static Water Absorption of Leather

D 2212 Standard Test Method for Slit Tear Resistance of Leather

D 2813 Practice for Conditioning Leather and Leather Products

D 4966 Standard Test Method for Abrasion Resistance of Textile Fabrics (Martindale Abrasion Tester Method)

E 96 Standard Test Method for Water Vapour Transmission of Materials

American Association of Textile Chemists and Colorists (AATCC)
P.O. Box 12215
Research Triangle Park, North Carolina USA
27709

AATCC 118 Oil and Stain Release

British Standards Institution (BSI)
389 Chiswick High Road
London, United Kingdom, W4 4AL
Phone: 44 181 996 7000
Fax: 44 181 996 7001

EN ISO 15025 Protective clothing - Protection against flame - Method of test for limited flame spread

KES Kato Tech Co., Ltd.
26 Karato-cho Nishikujo Minami-ku
Kyoto 601 Japan
Phone: 075-681-5244
Fax: 075-681-5243

Manual for Pure Bending Tester KES-FB-2

ISO International Standards
International Organization for Standardization
ISO Central Secretariat
Chemin de Blandonnet 8
CP 401
1214 Vernier, Geneva
Switzerland

D 1813 Standard Test Method for Measuring Thickness of Leather Test Specimens

D 1814 Standard Test Method for Measuring Thickness of Leather Units

D6015 Standard Test Method for Static Water Absorption of Leather

D 2212 Standard Test Method for Slit Tear Resistance of Leather

D 2813 Practice for Conditioning Leather and Leather Products

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KES Kato Tech Co., Ltd.
26 Karato-cho Nishikujo Minami-ku
Kyoto 601 Japan
Phone: 075-681-5244
Fax: 075-681-5243

Manual for Pure Bending Tester KES-FB-2

Normes internationales ISO
Organisation internationale de normalisation
Secrétariat central de l'ISO
Chemin de Blandonnet 8
CP 401
1214 Vernier, Genève
Suisse

Telephone: +41 22 749 01 11
E-mail: central@iso.org
Website: http://www.iso.org/iso/home.html

ISO 17230 (Leather – Physical and Mechanical Tests – Determination of Water Penetration Pressure)

The Textile Machinery Society of Japan,
Osaka Science and Technology Center Bldg.
8-4, Utsubo-Honmachi 1 chome, Nishi-ku
Osaka 550-0004, Japan

Phone: +81-6-6443-4691
Fax: +81-6-6443-4694
E-mail: info@tmsj.or.jp

Kawabata, S (1980) The Standardization and Analysis of Hand Evaluation (2nd Edition), Chapter IV. Measurement of the Mechanical Properties of Fabrics, paragraph 2.2 Bending Property

2.2 **Master Sealed Patterns**.

DSSPM 388-17 Leather, Goatskin, Aniline, Chrome Tanned, Fire Retardant Gloving

2.3 **Order of Precedence.**

2.3.1 In the event of any inconsistency in contract documents such as contract, specification and sealed patterns, the order of precedence will be contract, specification, and sealed pattern.

2.3.2 In the event of a conflict between the text of this specification and the references cited herein, the text of this specification takes precedence.

2.3.3 In the event of inconsistency within the specification, including inconsistency between languages, the Contracting Authority must be contacted for clarification.

3 **REQUIREMENTS**

3.1 **Sealed Samples.** A sealed sample will be supplied to the successful bidder. The sealed sample must constitute the standard in regard to any properties not specified in the specification.

3.2 **Materials.** The leather must be chrome tanned from green or salted goat hides. The finished leather must be thoroughly tanned and mellow and of good fibre. Pipey (flanky) leather will not be accepted. Materials used in tanning and finishing must have no

Téléphone: +41 22 749 01 11
Courriel: central@iso.org
Site Internet: http://www.iso.org/iso/fr/home.htm

ISO 17230 (Cuir — Essais physiques et mécaniques — Détermination de la pression de pénétration de l'eau)

The Textile Machinery Society of Japan,
Osaka Science and Technology Center Bldg.
8-4, Utsubo-Honmachi 1 chome, Nishi-ku
Osaka 550-0004, Japan

Phone: +81-6-6443-4691
Fax: +81-6-6443-4694
E-mail: info@tmsj.or.jp

Kawabata, S (1980) The Standardization and Analysis of Hand Evaluation (2nd Edition), Chapter IV. Measurement of the Mechanical Properties of Fabrics, paragraph 2.2 Bending Property

2.2 **Modèle réglementaire**.

DSSPM 388-17 Cuir De Peau De Chèvre Aniline Tanné Au Chrome, Ignifuge, Pour Gants

2.3 **Ordre de préséance**.

2.3.1 En cas de divergence entre les documents contractuels, tels le contrat, la spécification et les modèles réglementaires, l'ordre de préséance sera: le contrat, la spécification et les modèles réglementaires.

2.3.2 En cas de divergence entre les documents mentionnés aux présentes et le contenu de la présente spécification, cette dernière a préséance.

2.3.3 En cas d'incohérence dans l'énoncé de la spécification, incluant l'incohérence entre les langues, il faut communiquer avec l'autorité responsable du contrat pour obtenir des précisions.

3 **EXIGENCES**

3.1 **Modèles approuvés.** Un modèle approuvé, lorsque disponible, sera fourni au soumissionnaire retenu. Le modèle approuvé doit constituer la norme en ce qui concerne les propriétés qui ne sont pas spécifiées dans la spécification.

3.2 **Matériaux.** Le cuir doit être tanné au chrome à partir de peaux de chèvre vertes ou saumurées. Le cuir fini doit être entièrement tanné et adouci et composé de fibres de qualité. Le cuir flancheux ne sera pas accepté. Les matériaux utilisés pour le tannage et la

injurious effects on the leather or the ultimate user of the leather.

3.3 **Finish.** The leather must be full grain (not buffed or snuffed) and free from imperfections or blemishes that may affect its appearance or serviceability. The leather must be soft, smooth, and pliable. The flesh side must be smooth and free from loose flesh. Unless otherwise specified, the finish must not have an excessive amount of pigment

3.4 **Trim.** The edges of the belly and the forepart must be trimmed in accordance with standard tannery practice and must be free from ragged edges.

3.5 **Chemical and Physical Properties.** The goatskin leather must meet the requirements specified in Table I in accordance with the test methods referenced. Test results from independent accredited laboratories to confirm these properties must be provided as detailed in the contracting requirements. Unless otherwise stated, all testing is to be carried out in accordance with the latest published method, valid at the publication date of this document.

3.5.1 **Location of Test Specimens.** The specimens for all testing requirements in Table I must be taken 2 inches from the backbone line and a minimum 5 inches from the hind edge as per Figure 1. The same specimen location in Figure 1, but from the left flank may also be used to take specimens for testing.

3.5.2 **Details - Exposure To Chemicals**. Testing for exposure to chemicals to the leather must be done to verify that there will be no degradation to materials that would interfere directly with overall performance characteristics.

3.5.2.1 **Procedures**. Testing must include the following chemicals:

a. Diesel fuel in accordance with CAN/CGSB-3.6, Type A;
b. Insect repellent (DEET) liquid, CAN/CGSB-15.19 (75%); and
c. Broad Spectrum Sunscreen (SPF 30) with the active ingredients of octocrylene (5 % to 10%), and avobenzone (2% to 3%).

finition ne doivent pas nuire au cuir ni à l'utilisateur final du cuir.

3.3 **Finition.** Le cuir doit être pleine fleur (non poncé ni effleuré) et exempt d'imperfections ou de défauts qui pourraient nuire à son aspect ou à son aptitude au service. Le cuir doit être souple, lisse et pliable. Le côté chair doit être lisse et exempt de morceaux de chair. Le cuir doit être teint au foulon avec des teintures solides.

3.4 **Rognage.** Les bords des flancs et du devant doivent être rognés conformément aux pratiques de tannage courantes et doivent être exempts de déchirures.

3.5 **Propriétés chimiques et physiques.** Le cuir de chèvre doit satisfaire aux exigences spécifiées dans le tableau I, conformément aux méthodes d'essai citées. Les résultats des tests de laboratoires indépendants accrédités pour confirmer ces propriétés doivent être fournis comme détaillé dans les exigences contractuelles. Sauf indication contraire, tous les essais doivent être effectués conformément à la dernière méthode publiée, valable à la date de publication de ce document.

3.5.1 **Situation des éprouvettes.** Les spécimens de toutes les exigences relatives aux essais dans le tableau I sont prises 2 pouces de la ligne de colonne vertébrale et un minimum de 5 cm du bord arrière comme le montre la Figure 1 Le même emplacement de l'échantillon de la figure 1, mais à partir du flanc gauche peut également être utilisé pour prélever des échantillons pour les essais.

3.5.2 **Détails - Exposition aux produits chimiques**. Les essais d'exposition aux produits chimiques du cuir doivent être effectués pour vérifier qu'il n'y aura pas de dégradation des matériaux pouvant nuire directement aux performances globales.

3.5.2.1 **Procédures**. Les essais doivent inclure les produits chimiques suivants:

a. Carburant diesel conforme à CAN / CGSB-3.6, type A;
b. Insectifuge liquide DEET conformément à la norme CAN/CGSB-15.19 (75%); et
c. Écran solaire à large spectre (FPS 30) ayant au moins des ingrédients actifs comme l'octocrylene (5% to 10%) et l'avobenzone (2% to 3%).

3.5.2.2 **Test Method**.

a. Two (2) specimens must be tested separately for each chemical.
b. Chemicals must be placed on the grain or hair side of the leather.
c. A small drop (approximately 1 mL) of each chemical must be placed on the test specimen and then immediately covered with a watch glass.
d. The watch glass must be left in place for 1 hour.
e. The specimens must be visually evaluated after 1 hour and 24 hour periods.
f. There must be no evidence of degradation.

3.5.2.2 **Méthode d'essai**.

a. Deux (2) échantillons doivent être testés séparément pour chaque produit chimique;
b. Les produits chimiques doivent être placés sur le côté grain ou les cheveux du cuir;
c. Une petite goutte (environ 1 ml) de chaque produit chimique doit être placée sur l'éprouvette d'essai puis immédiatement recouverte d'un verre de montre;
d. Le verre de montre doit être laissé en place pendant 1 heure;
e. Les échantillons doivent être évalués visuellement après des périodes de 1 heure et 24 heures;
f. Il ne doit y avoir aucune preuve de dégradation.

3.5.2.3 **Degradation of the leather**. After exposure to the chemicals using the test procedure outlined above (see paragraphs 3.5.2.1 and 3.5.2.2), the leather must not have any changes resulting in degradation affecting end item/component performance. Examples of changes in degradation would be pitting, decomposition, clouding, crazing, cracking, and dissolving of the material(s) and disintegration of the material(s).

3.5.2.3 **Dégradation du cuir**. Après exposition au produit chimique en utilisant la procédure d'essai (voir paragraphes 3.5.2.1. et 3.5.2.2), le cuir ne doit subir aucune modification entraînant une dégradation des performances de l'élément final ou du composant. Des exemples de changements dans la dégradation sont les suivants: piqûre, décomposition, opacification, craquelage, fissuration et dissolution du ou des matériaux et désintégration du ou des matériaux.

3.5.3 **Notes for Bending Rigidity Test**. Note the following references for the test procedure:

a. Kawabata, S (1980) The Standardization and Analysis of Hand Evaluation (2nd Edition), Chapter IV. Measurement of the Mechanical Properties of Fabrics, paragraph 2.2 Bending Property; and

b. KES Kato Tech Co. Ltd, Manual for Pure Bending Tester, KES-FB-2

3.5.3 **Références pour la procédure de test de rigidité à la flexion**. Notez les références suivantes pour la procédure de test:

a. Kawabata, S (1980) « The Standardization and Analysis of Hand Evaluation (2nd Edition), Chapter IV. Measurement of the Mechanical Properties of Fabrics, paragraph 2.2 Bending Property »; et

b. KES Kato Tech Co. Ltd, « Manual for Pure Bending Tester, KES -FB- 2 »

3.6 **Colour.** The goatskin leather must be drum dyed using aniline dyes, with thorough colour penetration from flesh side to the grain side of the leather. The colour must be as stipulated in the end item specification.

3.6 **Couleur.** Le cuir de chèvre tambour est teint avec des colorants d'aniline, avec une pénétration de la couleur de fond du côté de la chair vers le côté fleur du cuir. La couleur doit être tel que spécifié dans la spécification du produit final.

3.7 **Thickness.** The leather thickness must be as specified in the end item specification.

3.7 **Épaisseur.** L'épaisseur de cuir doit être tel que spécifié dans la spécification du produit final.

3.8 **Care and Cleaning.** The goatskin leather must require only limited user maintenance. The leather must be able to be maintained by hand washing in warm water with mild laundry detergent or hand soap

3.8 **Entretien et nettoyage.** Le cuir de chèvre utilisé dans les gants doit exiger que l'entretien d'utilisateur limité. Le cuir doit pouvoir être maintenu par le lavage des mains à l'eau tiède avec un détergent à lessive ou

and air-dried. The leather is not to be machine washed or dried.

4 QUALITY CONTROL/INSPECTION

4.1 The contractor must be responsible for the performance of all inspections and tests necessary to demonstrate that the material and services conform to the requirements of this specification. The contractor may utilize his own inspection and test equipment, or that of any other facility acceptable to the Quality Assurance Authority.

4.2 The Quality Assurance Authority reserves the right to perform any verification or test activities deemed necessary to confirm that the material and services conform to the contract requirements.

5 PACKAGING

5.1.1 **Packaging and packing**

5.1.2 Unless otherwise specified, packaging and packing as well as delivery must be in accordance with the terms of the contract.

6 NOTES

6.1 Procurement documents should specify the title, number and date of this specification.

6.2 **Specification Copies.** Copies of this specification may be obtained from the Department of National Defence, Ottawa, Ontario, K1A 0K2, Attention: DSSPM 2-3.

6.3 **Safety, Health and Environmental Concerns.** The production of a product to this specification, or the evaluation of a product to this specification, may require the use of materials and/or equipment that could be hazardous. This specification does not purport to address all safety, health and environmental concerns, if any associated with its use. It is the responsibility of the user of this specification to establish appropriate safety, health and environmental practices and to determine the applicability of regulatory limitations prior to use.

du savon à la main et séché à l'air. Le cuir de chèvre ne doit pas être lavé à la machine ou séché.

4 CONTRÔLE DE LA QUALITÉ OU INSPECTION

4.1 L'entrepreneur est responsable de l'exécution de toutes les inspections et essais nécessaires pour démontrer que le matériel et les services sont conformes aux exigences de cette spécification. L'entrepreneur peut utiliser son propre matériel d'inspection et de test, ou de tout autre établissement acceptable pour l'Autorité de l'assurance qualité.

4.2 Le responsable de l'assurance qualité se réserve le droit de procéder à toutes opérations de vérification ou d'essai jugées nécessaires pour confirmer que le matériel et les services sont conformes aux exigences du contrat.

5 CONDITIONNEMENT

5.1.1 **Conditionnement et emballage**

5.1.2 Sauf indication contraire, le conditionnement, l'emballage et l'expédition doivent être conformes aux termes du présent contrat.

6 NOTES

6.1 Les documents d'achat doivent indiquer le titre, le numéro et la date de la présente spécification.

6.2 **Copies de la spécification.** Des copies de la présente spécification peuvent être obtenues auprès du ministère de la Défense nationale, Ottawa, Ontario, K1A 0K2, à l'attention de : DAPES 2-3.

6.3 **Exigences relatives à la santé, à la sécurité et à l'environnement.** La fabrication ou l'évaluation d'un produit conformément à la présente spécification pourrait nécessiter l'utilisation de matériaux ou d'équipement susceptibles d'être dangereux. La présente spécification n'a pas pour objet de traiter de toutes les préoccupations relatives à la santé, à la sécurité et à l'environnement qui pourraient être associées à son utilisation. Il incombe à l'utilisateur de la spécification d'établir au préalable des méthodes appropriées qui tiennent compte des questions d'environnement, de santé et de sécurité, et de déterminer les restrictions réglementaires applicables.

6.4 **Definition of terms.**

6.4.1 **Master Sealed Pattern.** A master sealed pattern is the authorized prototype of the item to be produced, and is held only by the Government.

6.4.2 **Quality Assurance Authority.** The Quality Assurance Authority is the Government agency responsible for ensuring that materiel and services supplied by the contractor perform to the specified requirements. The Quality Assurance Authority will be specified in the contract.

6.4.3 **Sealed Pattern.** A sealed pattern is an exact duplicate of the master sealed pattern and is available to the manufacturer to be used as a guide in production.

6.4.4 **Technical Authority.** The Technical Authority is the Government agency responsible for the technical aspects of this specification. The Technical Authority for this requirement is the Directorate of Soldier Systems Program Management (DSSPM 2), Department of National Defence, 101 Colonel By Drive, Ottawa, Ontario, K1A 0K2.

6.4 **Définition des termes**

6.4.1 **Modèle approuvé principal.** Prototype autorisé de l'article qui doit être fabriqué et dont le gouvernement est le détenteur.

6.4.2 **Autorité responsable de l'assurance de la qualité.** Organisme gouvernemental chargé d'assurer que le matériel et les services fournis par l'entrepreneur respectent les exigences prescrites. L'autorité responsable de l'assurance de la qualité sera précisée dans le contrat.

6.4.3 **Modèle approuvé.** Copie exacte du modèle approuvé principal mis à la disposition du fabricant qui doit l'utiliser comme un guide**.**

6.4.4 **Autorité technique.** Organisme gouvernemental responsable des aspects techniques de la présente spécification. L'autorité technique pour le présent besoin est la Direction – Administration du programme de l'équipement du soldat (DAPES 2), ministère de la Défense nationale, 101, promenade Colonel By, Ottawa, Ontario, K1A 0K2.

TABLE I: LEATHER REQUIREMENTS

PROPERTY	TEST METHOD	REQUIREMENT
Thickness	ASTM D1813 or D1814 (Woburn Gauge)	2 to 2-1/2 ounces (0.90 mm +/-0.1 mm)
Colourfastness to Crocking	CAN/CGSB-4.2 Method 22	**Dry Stain**: Minimum: Grey Scale 4 **Wet Stain**: Minimum: Grey Scale 3
Colourfastness to Perspiration	CAN/CGSB-4.2 Method 23	**Colour Change**: Minimum: Grey Scale 4 **Stain**: Minimum: Grey Scale 4
Colourfastness to Water	CAN/CGSB-4.2 Method 20	**Colour Change**: Minimum: Grey Scale 4 **Stain**: Minimum: Grey Scale 4
Colourfastness to Sea Water	CAN/CGSB-4.2 Method 21	**Colour Change**: Minimum: Grey Scale 4 **Stain**: Minimum: Grey Scale 4
Water Resistance	ISO 17230	**Minimum Average**: 25 kPa (No specimen may be less than 20kPa.)
Limited Flame Spread The test to determine afterflame time and afterglow time must be done on leather specimens.	EN ISO 15025 Procedure B - Bottom Edge Ignition (10 seconds) _____ Procedure A - Surface Ignition (10 seconds)	**Results for both tests:** **Afterflame Time:** maximum: 2.0 seconds **Afterglow Time:** maximum: 5.0 seconds
Tear Strength: **Initial** **After Abrasion** For both requirements – test 5 specimens per direction (parallel and perpendicular to the backbone)	ASTM D2212 ASTM D 4966 (1600 cycles) then ASTM D2212	**Minimum**: 40N (average of 10 specimens) No specimen must be less than 40N in either direction. **Minimum**: 40N (average of 10 specimens) No specimen must be less than 40N in either direction.
Water Vapour Diffusion	ASTM E96 (desiccant method)	Minimum: 50.0 grams/m^2/hour
Static Water Absorption	ASTM D6015 Time: 30 minutes	Maximum: 20%

PROPERTY	TEST METHOD	REQUIREMENT
Stiffness	Bending Rigidity See para 3.5.3 for notes. Kawabata Evaluation System Sensitivity: 5x1	Maximum B Mean: Length: 1.5 gf·cm^2/cm Width: 1.0 gf·cm^2/cm
Oil and Stain Release NOTE: Liquids will lose contact angle on leather and droplets will spread out. This is not to be considered a failure. However, liquids soaking into the leather constitute a failure.	AATCC 118	Minimum: Rating 4
Chemical Resistance	See para 3.5.2 for chemical information, test method and definition for passing test.	See para 3.5.2 for definition of degradation. Diesel Fuel: No degradation; DEET: No degradation; and Sunscreen: No degradation;

TABLEAU I: EXIGENCES DU CUIR

PROPRIÉTÉ	MÉTHODE D'ESSAI	REQUIREMENT
Épaisseur	ASTM D1813 ou ASTM D1814 (« Woburn Gauge »)	2,0 to 2,5 onces (0.90 mm +/-0.1 mm)
Solidité de la couleur au frottement (dégorgement)	CAN/CGSB-4.2 N^o 22	**Tachage:** Sec (minimum): échelle de gris 4 Mouillé (minimum): échelle de gris 3
Solidité de la couleur à la sueur	CAN/CGSB-4.2 N^o 23	**Changement de couleur** (minimum): échelle de gris 4 **Tachage** (minimum): échelle de gris 4
Solidité de la couleur à l'eau	CAN/CGSB-4.2 N^o 20	**Changement de couleur** (minimum): échelle de gris 4 **Tachage** (minimum): échelle de gris 4
Solidité de la couleur à l'eau de mer	CAN/CGSB-4.2 N^o 21	**Changement de couleur** (minimum): échelle de gris 4 **Tachage** (minimum): échelle de gris 4
Résistance à l'eau	ISO 17230	**Moyenne minimale**: 25 kPa (Aucun spécimen ne doit être inférieur à 20 kPa.)

PROPRIÉTÉ	MÉTHODE D'ESSAI	REQUIREMENT
Propagation de flamme limitée L'essai visant à déterminer la flamme persistant et temps « afterglow » doit être effectue sur des spécimens de cuir.	EN ISO 15025 Procédure B - Essai d'allumage du bord, vertical (10 seconds) Procédure A - Essai d'allumage en surface) (10 seconds)	**Résultats pour les deux tests:** Flamme persistante: maximum: 2,0 secondes « Afterglow »: maximum: 5,0 secondes
Résistance au déchirement: **initiale** **après l'abrasion** Pour les deux exigences – tester 5 échantillons par direction (parallèles et perpendiculaires à la colonne vertébrale)	ASTM D2212 ASTM D 4966 1600 cycles	Minimum: 40N (moyenne de 10 échantillons) Aucun spécimen ne doit être inférieur à 40N dans les deux sens Minimum: 40N (moyenne de 10 échantillons) Aucun spécimen ne doit être inférieur à 40N dans les deux sens
Diffusion de vapeur d'eau	ASTM E96 (méthode déshydratante)	Minimum: 50,0 grams/m^2/heure
Absorption statique de l'eau	ASTM D6015 Immersion de 30 minutes	Maximum: 20%
Épaisseur de surface	rigidité à la flexion Voir paragraphe 3.5.3. pour nota Kawabata Evaluation System Sensitivity: 5x1	Maximum Moyenne B: Longueur: 1,5 gf·cm^2/cm Largeur: 1,0 gf·cm^2/cm
Libération d'huile et de taches REMARQUE: Les liquides perdent leur angle de contact sur le cuir et les gouttelettes se répandent. Cela ne doit pas être considéré comme un échec. Cependant, les liquides absorbant dans le cuir constituent un échec.	AATCC 118	Minimum: cote 4
Résistance aux substances chimiques	Voir le paragraphe 3.5.2 pour les informations chimiques, la méthode d'essai et la définition de l'essai.	Voir le paragraphe 3.5.2 pour la définition de la dégradation. Carburant diesel: pas de dégradation; DEET: pas de dégradation; et Crème solaire: pas de dégradation;

Annex C – Questions For Industry

A. General

1. Would you be interested in being a Potential Bidder or supporting a Potential Bidder (as a material provider) for a solicitation of Temperate Weather Gloves (TWG)?

2. Is your manufacturing facility in Canada?

3. The initial solicitation (W8476-206207/A) required procurement limited to Canadian goods in accordance with paragraph 1 of SACC Manual clause A3050T (Canadian Content Definition). If you intend on bidding on a potential re-tender, will your bid offered be considered Canadian goods?

4. Can you advise on average delivery rates for an all leather glove made in accordance with Annex A?

5. Do you have any comments or recommendations regarding the information presented in this RFI that would assist Canada in the manufacturing and delivery of the Temperate Weather Gloves (TWG)?

B. For Glove Manufacturers

1. What experience does your company have supplying hand wear (gloves and mittens) through contracts with Canada? Please describe the glove, quantities and identify contract numbers and Government agency, if possible.

2. Does your company employ a technician experienced in table cutting?

3. Do you think that the glove design identified in Annex A requires table cutting of the leather?

4. Can you estimate how much time would your company would need to obtain a test report from an independent accredited laboratory showing full compliance to the requirements as per Annex B, Table I? Would your company test the leather or would you rely on the source of supply to fully test the leather?

C. For Leather Tanneries / Leather Suppliers

1. Can you provide a leather that is fully compliant to all of the requirements as per Annex C? If not, please detail why and possible solutions/compromises DND should consider.

2. Knowing the requirements (RFI, paragraph 3.1), would you suggest a different material be suggested? Please detail the material(s) and give reasoning.

3. On average, how many square feet of leather is considered one (1) lot? How often does your company perform quality assurance on the leather?