Canadian Guidelines for the Uniform Labelling of Blood and Blood Components Using *ISBT 128*

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Document History

Version	Date	Description of Change
1.0	September 2011	Initial version.
2.0	January 2015	Updates to the sections indicated below: • 2 Addition of phenotype to glossary • 8.3 Use of product codes in series "A" • 8.9 Update to Data Structure 014 • 9.3 Changes to eye readable phenotype text • 9.4 Changes to Canadian Blood Services label including discontinuation of extended label. • 9.5 Changes to Héma-Québec label

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1. Preface

This document delineates the Canadian guidelines for the labelling of blood and blood components using ISBT 128. It is intended to provide necessary information to assist in implementing and using ISBT 128 in Canada.

Labelling of blood and blood components by blood operators in Canada align with the ISBT 128 Standard: Technical Specification. That document is the definitive source describing ISBT 128 and should be consulted when implementing and using ISBT 128. The ISBT 128 Standard: Technical Specification is published on the ICCBBA, Inc website. The URL is http://www.ICCBBA.org. Access to ISBT 128 databases is provided to facilities that register with ICCBBA, Inc. Updates will be made available to facilities that maintain their registration through payment of an annual license fee.

This document is intended to be used in conjunction with the ISBT 128 Standard: Technical Specification. There are several options outlined in the ISBT 128 Standard: Technical Specification that are noted as "nationally determined." This document provides the options selected by the Canadian blood operators, Canadian Blood Services and Héma-Québec, for blood and components produced in Canada.

This document provides the guidelines for labelling in compliance with the ISBT 128 Standard. Other regulatory requirements may also apply for labelling of blood components.

CAUTION: The illustrations throughout this document are not "real," accurate representations of ISBT 128 labels. The illustrations are not necessarily to scale. The bar codes are representations only and cannot be scanned. Therefore, bar codes should be printed and positioned on labels according to the ISBT 128 Standard: Technical Specification.

2. Glossary of Terms

Term	Description
Attribute	Attributes provide additional information about a blood component. They are categorized as "Core Conditions" and "Other Attributes" groups.
Autologous	Blood collected from the intended recipient
Base Label	The label applied by the manufacturer to: (1) primary and satellite containers for the collection of Whole Blood; (2) apheresis collection containers; and (3) transfer containers
Core conditions	The anticoagulant and/or additive, nominal collection volume and storage temperature requirements for a blood component
Data content	The characters in a data structure that encode the information for which the data structure is named. The data content does not include the data identifiers
Data identifier	The first two characters in a data structure that identify the data structure. These will always be present when the data structure is used as a bar code, but may be omitted when the data structure is used in situations in which the data structure identity is unambiguously and explicitly defined.
Dedicated	A collection arranged by the collecting facility to support a specific recipient on a frequent basis (for example, to ensure limited exposure to allogeneic products). Héma-Québec refers to this donation type as a designated donation on the component label
Directed	A unit collected from a donor who presents to the collecting facility at the request of another person to provide product to be used by that person.
Donation Number Label	A label bearing the ISBT 128 Donation Identification Number. Produced in sets, these labels are allocated at the point of donation and ensure the unique labelling of all collection containers, record of donation and samples collected from a single donation event.
Flag character	Part of the data content of a data structure used in process control or data transmission checking. Printed in eye-readable format on the label, but distinguished in some manner from the representation of the other data characters
Modifier	A description that relates to the Core Conditions of a blood component and distinguishes it from other members of the same Class (such as Apheresis, Frozen, Frozen Rejuvenated or Washed)

Term	Description
Phenotype	The observable expression of the genes inherited by a person that reflects the biological activity of the genes. In ISBT 128 coding of test results, the term phenotype includes predicted phenotypes based on genotyping where there is evidence in the literature to support such a prediction.

3. ISBT 128 Standard: Technical Specification

The ISBT 128 Standard: Technical Specification:

- describes the layout for a blood component label;
- defines the data identifiers for bar codes used in the transfusion medicine environment;
- defines the data structures that carry information, i.e., how a particular bar code will be recognized by a reader, how many characters there are, and whether the characters are letters, numbers or both;
- includes tables that define how complex bar codes should be translated, such as ABO/Rh Blood Groups and Type of Donation or Collection;
- defines technical details for the bar code itself, such as the width of the narrowest bars and the minimum height of the bars;
- describes the variation made in Code 128 to support specialized "concatenation."

4. ISBT 128 Data Structures

Data structures define the way in which information is presented in ISBT 128. Each data structure consists of data identifiers and data content. These data structures can be incorporated into many different information delivery systems including bar codes, electronic messages, 2-D bar codes and radio frequency ID tags.

Where an ISBT 128 data structure is presented within a Code 128 bar code the data characters are printed in eye-readable format immediately beneath the bar code.

The ISBT 128 data structures of the Code 128 bar codes appearing on labels of blood components produced in Canada are listed in **Table 1. Table 2** lists the ISBT 128 data structures that may be visible on the container base label. Each of these data structures are described in subsequent sections of this document.

Refer to the ISBT 128 Standard: Technical Specification for a description of all ISBT 128 data structures.

Table 1: Data Structures Used on Blood Component Labels in Canada	
Data Structure	**Bar Code**
001	Donation Identification Number
002	Blood Group
003	Product Code
005	Expiration Date and Time
007	Collection Date and Time
009	Production Date and Time
010	Special Testing: General
012	Special Testing: Red Blood Cell Antigens – General
014	Special Testing: Platelet HLA and Platelet-Specific Antigens

Table 2: Data Structures for Container Base Labels	
Data Structure	**Bar Code**
017	Container Manufacturer and Catalog Number
018	Container Lot Number

5. ISBT 128 Data Identifiers

Data identifiers define the type of information the bar code contains; for example, the second character distinguishes an ABO/Rh bar code from a Product Code bar code (e.g., the two characters "=%" at the beginning of a bar code indicate that the bar code carries information about the ABO/Rh Blood Groups whereas "=<" means a Product Code bar code).

Each bar code structure on a blood component label will begin with two data identifier characters. The exception, for the Donation Identification Number is that the second data identifier character, for this data structure only, is also the first character of the data content.

The first character will always be "=" or "&." By international agreement (see the ISBT 128 Standard: Technical Specification) these characters are reserved to mean "this bar code specifies an ISBT 128 data structure."

Refer to **Table 3** for the list of data identifiers associated with the bar codes appearing on labels of blood components produced in Canada. Refer to **Table 4** for data identifiers that are associated with the bar codes appearing on container base labels

Table 3: Data Identifiers Used on Blood Component Labels in Canada	
Data Identifier	**Bar Code**
=α	Donation Identification Number
=%	Blood Group
=<	Product Code
&>	Expiration Date & Time
&*	Collection Date & Time
&}	Production Date & Time
&(	Special Testing: General
=\	Special Testing: Red Blood Cell Antigens – General
&{	Special Testing: Platelet HLA and Platelet-Specific Antigens

Table 4: Data Identifiers Used on Base Labels	
Data Identifier	**Bar Code**
=)	Container Manufacturer and Catalog Number
&)	Container Lot Number

6. ISBT 128 Standard Base Label

Blood containers are labelled with a base label by the manufacturer of the container. The standard ISBT 128 base label is 100 (± 2) mm by 106 (± 2) mm and carries the two manufacturer's information bar codes in the position shown in **Figure 1**:
- Container Manufacturer and Catalog Number (Data Structure 017) (bar code 1);
- Container Lot Number (Data Structure 018) (bar code 2).

Refer to the ISBT 128 Standard: Technical Specification for a description of the data structures for these two bar codes.

One or both of the container manufacturer's information bar codes may be covered by final labelling. It is preferable that the eye-readable text remain visible after the application of the final component label.
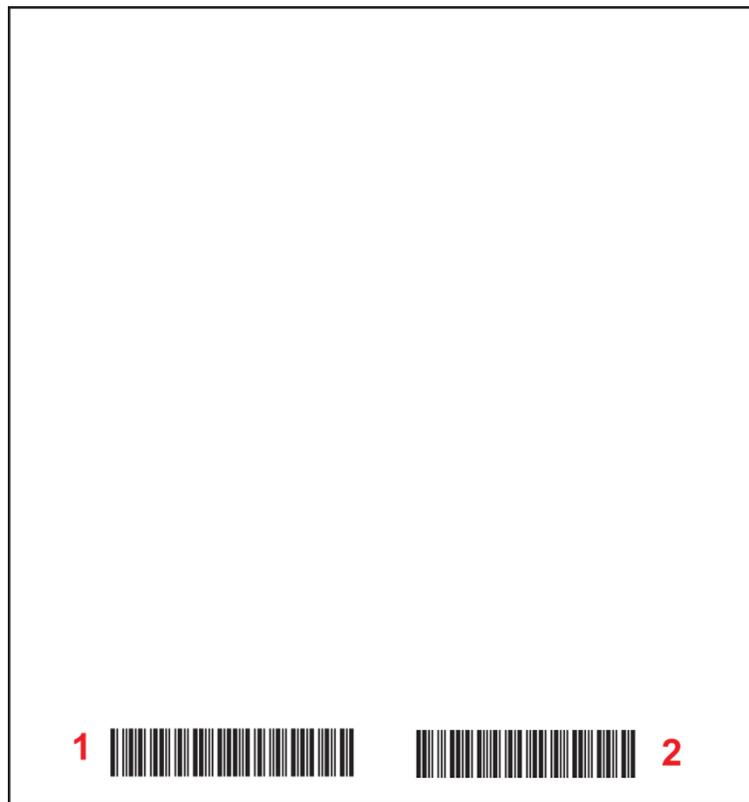
Figure 1:   Bar Code Placement on Standard ISBT 128 Base Label

7. ISBT 128 Blood Component Label

The ISBT 128 blood component label is 100 (± 2) mm by 100 (± 2) mm. The label is divided into four quadrants of equal size 50 (±1) mm wide by 50 (±1) mm long.

Regardless of site of collection world wide, the bar codes should be placed in the same relative positions. The ISBT 128 Standard: Technical Specification defines the placement of the bar codes.

Placement of the bar codes present on labels of blood components produced in Canada is shown in **Figure 2:**
- Donation Identification Number (Data Structure 001) (bar code 1);
- ABO/Rh Blood Groups, Type of Donation or Collection Information (Data Structure 002) (bar code 2);
- Collection Date and Time (Data Structure 007) or Production Date and Time (Data Structure 009) (bar code 3)
- Product Code, Type of Donation or Collection, Information regarding division of the product (Data Structure 003) (bar code 4);
- Expiration Date and Time (Data Structure 005) (bar code 5);
- Special Testing (Data Structures 010, 012 or 014) (when applicable) (bar code 6).
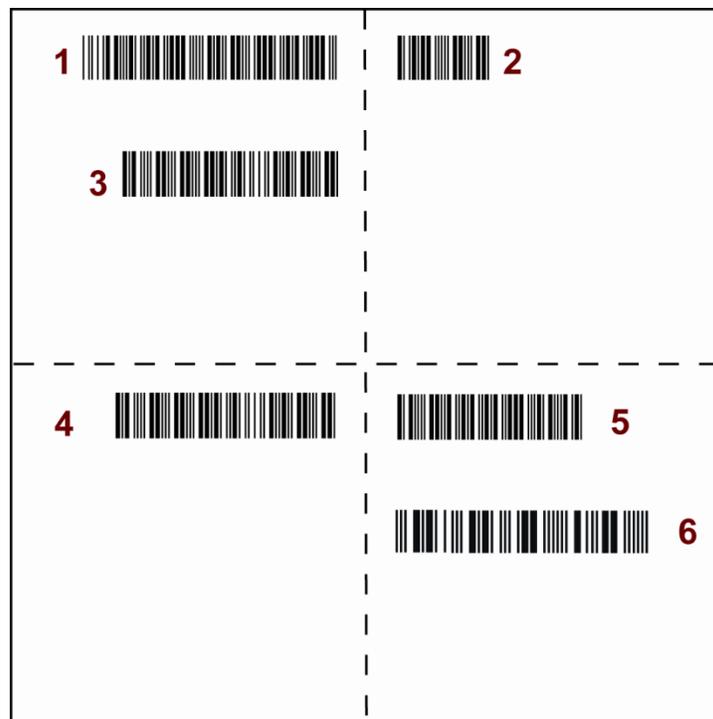
Figure 2: Bar Code Placement on ISBT 128 Blood Component Label

Process control can be enhanced through the use of concatenation (reading of two or more bar codes as if they were a single bar code). For this reason, the Donation Identification Number and ABO/Rh Blood Group bar codes have been positioned on the label to facilitate a single scanning motion. The Product Code and Expiration Date and Time bar codes are similarly aligned.

With the exception of the Donation Identification Number, for which the eye-readable information is presented in a specialized way, the data characters in the bar code are printed immediately below the symbol.

The eye-readable representation of the interpreted bar coded information (called bar code text in this document) and any other information on the label (called additional label text in this document) is defined by each blood operator to meet its own requirements.

8. Description of the ISBT 128 Data Structures

8.1.   Data Structure 001: Donation Identification Number

The bar code data structure for the donation number (Data Structure 001) is comprised of 15 data characters (plus the data identifier) as shown below.

Note: This is the only data structure where the second character of the data identifier is part of the data content

=αppppyynnnnnnff	
=	Data Identifier (first character)
αpppp	Facility Identification Number (FIN) *Note: α is the second data identifier character.*
yy	Last 2 digits of the year of collection *Note: To cut down on wastage, it is permissible to use Donation Number labels for up to one month in the year before, and one month in the year after, the year shown on the label.*
nnnnnn	Serial Number
ff	Flag Characters (NOT part of Donation Identification Number)

This data structure provides for the unique identification of any donation or collection world wide for a one hundred year period.

A complete list of registered facilities can be found on the ICCBBA web site.

Manual Entry Check Character

An additional manual entry check character (not the same character integral to every Code 128 bar code) will be printed, enclosed in a box, to the right of the Donation Identification Number (see **Figure 3**). This check character should be used to ensure the accuracy of keyboard data entry when supported by the appropriate computer software.

Figure 3: Manual Entry Check Character

This check character is calculated on the first 13 data characters of the donation number, excluding the flag characters (i.e.$\forall$ppppyynnnnnn). The ISO modulo 37,2 method is used to compute this check character. (For further information, see ISBT 128 Technical Specification, Appendix A.)

Flag characters

Flag characters are the last two characters of the Donation Identification Number data structure. They are not part of the Donation Identification Number itself. Flag characters are used in process control by the blood operators. Refer to **Table 5** for a list of flag characters used in process control by Canadian blood operators. When printed in eye-readable format on labels of blood components these flag characters will be rotated 90 degrees.

Table 5: Flag Characters Used for Process Control in Canada		
Flag Characters	**Description**	**Location**
20	Flag characters that appear on the Donation Number Label applied to blood containers at time of collection to identify the donation. Additional Donation Number Labels may be applied to the back of the container.	Donation Number Labels
21	Flag characters that are printed on the ISBT 128 label at initial labelling.	ISBT 128 label
22	Flag characters that are printed on the ISBT 128 labels of components that have been transformed (e.g. irradiated, washed, etc).	ISBT 128 label

Table 5: Flag Characters Used for Process Control in Canada		
Flag Characters	**Description**	**Location**
23	Flag characters that appear on the Work in Progress label during preparation of the pool (HQ only).	Pool label
35	Flag characters appearing on labels of components that have been manually rejected as not suitable for transfusion or further manufacturing.	Reject label
00	The default flag characters (00) will appear in any place where the flag characters have not been defined.	• Separation labels • Work in Progress labels • Packing slip or any documents printed from the system

For further information regarding definition of additional flag characters refer to Table RT004 - Donation Identification Number Flag Digits in the ISBT 128 Standard: Technical Specification.

8.2.   Data Structure 002: Blood Groups

This data structure provides the coding for the blood groups (ABO/Rh), Rh and Kell phenotypes and type of donation. Its structure is shown below:

=%ggre	
=%	Data Identifiers
gg	ABO & Rh blood group and type of donation
r	Rh, Kell phenotype (optional) ***Note:*** *in Canada these phenotypes are not coded in this data structure so this value is always set to 0 (zero)*
e	Reserved for future use. Value always set to 0 (zero).

Refer to **Appendix 1** for a list of ABO/Rh blood group and donation type codes used in Canada.

Data Structure 002, Table RT006 - Special Messages is not encoded in the Blood Groups data structure by either Héma-Québec or Canadian Blood Services.

Data Structure 002, Table RT007 - Rh, Kell, and Mia/Mur Phenotypes is not used by either Héma-Québec or Canadian Blood Services.

8.3.   Data Structure 003: Product Code

The eight digit product code data structure includes donation type and allows for definition of additional information including component divisions/splits. The structure is shown below:

=<α0000tds	
=<	Data identifiers
α0000	Product code ***Note:*** *α is E or F for blood components*
t	Donation type (e.g. Volunteer, Directed)
d	First level divisions
s	Second level divisions

The first five (5) digits come from the ICCBBA database and are the 'core' product code which defines
- Core conditions – e.g. anticoagulant, volume, storage conditions
- Component Class - e.g. Red Blood Cells, Platelets
- Modifiers – e.g. washed, thawed
- Attributes – e.g. irradiated, residual white count, low platelet count

The 6th digit defines the donation type:

V	Volunteer Donor (see ***Note 1***)
1	Autologous Use Only
2	Directed Use Only
5	Dedicated Collection (Héma-Québec only) (see ***Note 2***)
X	Autologous Biohazard
A	Autologous Collection eligible for crossover (Héma-Québec only)

Note 1: *Volunteer homologous (allogeneic) donation is the Canadian default donation type.*
Note 2: *A collection arranged by the collecting facility to support a specific recipient on a frequent basis (for example, to ensure limited exposure to allogeneic products. Héma-Québec refers to this donation type as a designated donation on the component label.*

The 7th digit defines a division/split from the original component (e.g. A0, B0) and the 8th digit defines a division/split from the first divided/split component (e.g. Ba, Bb, Bc).

The ISBT 128 Product Code Database is maintained by ICCBBA. All blood components distributed nationally/internationally must have a standard ISBT 128 product code.

There are no international codes in the ISBT 128 Product Code Database for "in process" components (e.g. first stage of cryoprecipitate production). A set of codes (A0000 – D9999) has been reserved for internal blood agency/facility use for labelling "in-process" components. These codes should not appear on the final label of the blood component. However, components imported from blood operators outside of Canada may be managed by using generic product codes assigned from the "A" series that is reserved for national blood agency use.

Canadian Blood Services and Héma-Québec share the list of these national codes to avoid conflict in the use of these codes.

Canadian Blood Services and Héma-Québec maintain and provide a list of the product codes used in Canada to the hospitals that they service.

8.4.　Data Structure 005: Expiration Date and Time

Data structure 005 provides the coding for the expiration date and time of the component. The expiration date and time appears on all components.

&>cyyjjjhhmm	
&>	Data identifiers
c	Century in which component expires
yy	Year within the century in which component expires
jjj	Julian (Ordinal) day of the year on which component expires
hh	Hour at which component expires (00 to 23)
mm	Minute at which component expires (00 to 59)

Note: *For all the products that have a shelf life calculated in days, the expiration time is by default 23:59.*

8.5.   Data Structure 007: Collection Date and Time

Data structure 007 provides the coding for the collection date and time of the component. The collection date and time appears on all components except for Pooled Platelets.

&*cyyjjjhhmm	
&*	Data identifiers
c	Century in which component was collected
yy	Year within the century in which component was collected
jjj	Julian (Ordinal) day of the year on which component was collected
hh	Hour at which component was collected (00 to 23)
mm	Minute at which component was collected (00 to 59)

8.6.   Data Structure 009: Production Date and Time

Data structure 009 provides the coding for the production date and time of the component. The production date and time appears only on Pooled Platelet components.

&}cyyjjjhhmm	
&}	Data identifiers
c	Century in which component was produced
yy	Year within the century in which component was produced
jjj	Julian (Ordinal) day of the year on which component was produced
hh	Hour at which component was produced (00 to 23)
mm	Minute at which component was produced (00 to 59)

8.7.   Data Structure 010: Special Testing (General)

The data content string for data structure 010 Special Testing (General) is encoded and interpreted with reference to the Special Testing database table that is published and maintained by ICCBBA.

&(zzzzz	
&(	Data identifiers
zzzzz	5 digit alphanumeric data content string (A-Z;0-9)

The Special Testing (General) data structure indicates special characteristics of a component. In Canada the following special testing codes are used:
N0000   No special ISBT 128 tests
N0003   IgA Deficient
N0008   CMV Seronegative (Anti-CMV negative)
N0043   IgA Deficient, CMV Seronegative (Anti-CMV Negative).

This data structure will be found on labels of platelet and plasma components produced by Canadian Blood Services and only on labels of plasma components produced by Héma-Québec.

8.8.   Data Structure 012: Special Testing: Red Blood Cell Antigens - General

The data content string for data structure 012 Special Testing: Red Blood Cell Antigens – General is encoded and interpreted with reference to Tables RT009 and RT011 of the ISBT 128 Standard: Technical Specification.

=\aaaaaaaaaaaaaaaaii	
=\	Data identifiers
aaaaaaaaaaaaaaaaii	18 character data content string (0-9)

The Special Testing: Red Blood Cell Antigens – General data structure encodes red blood cell antigens typing and CMV antibody status. This data structure will be found on labels of whole blood and red blood cell components produced by Canadian Blood Services and Héma-Québec.

Rh antigens are encoded individually using positions 14, 15 and/or 16 and value of column 1 will be set to 9 (no information)

If additional red cell antigen testing has been performed but cannot be encoded in the bar code structure, the information may appear on the label in eye-readable form only.

8.9. Data Structure 014: Special Testing: Platelet HLA and Platelet-Specific Antigens

The data content string for data structure 014 Special Testing: Platelet HLA and Platelet-Specific Antigens is encoded and interpreted with reference to Tables RT013, RT014 and RT044 of the ISBT 128 Standard: Technical Specification.

&{AAAABBBBCCCCCCCCDE	
&{	Data identifiers
AAAA	Specifies HLA-A antigens and is encoded and interpreted according to Table RT013. Two **AA** values shall be encoded, followed by two **BB** values.
BBBB	Specifies HLA-B antigens and is encoded and interpreted according to Table RT013.
CCCCCCCC	Specifies platelet-specific antigens, IgA antigen and CMV antibody status and is encoded and interpreted according toTable RT014.
D	Reserved for future use. A default value of 00 (zero, zero) is used.
E	Specifies information about high titered antibodies to A and B antigens and is encoded and interpreted according to Table RT044.

This data structure provides information regarding HLA and HPA phenotypes, CMV antibody status, IgA status and information regarding high titered antibodies to A and B antigens for platelet products.

> Note1: The HLA phenotypes appear in eye readable format only and are not encoded in the Special Testing barcode.
> Note 2: Information regarding high titered antibodies to A and B antigens is displayed on the label by "T.E.N.D./H.T.N.D." which means High Titre Not Detected (Héma-Québec).

This data structure is currently used only on labels of platelets components produced by Héma-Québec

8.10. Data Structure 017: Container Manufacturer and Catalog Number

Data structure 017 provides coding to specify the manufacturer and catalog number of the container set and the identifying character(s) of the individual container(s) in the set. This data structure is not normally visible on the labelled blood component; however the eye-readable bar code text may be visible.

=)bqqwwwwwww	
=)	Data identifiers
b	The container identification character in a container or transfer set. The value of b is set as follows: • for whole blood and other non-apheresis collection sets, 1-9 et seq is used. 1 is reserved for the primary collection container; • for apheresis collection sets A-Z et seq is used . • for transfer container/sets, 0 (zero) is used. If more than one type of container is present in the transfer set, numeric characters 2-9 may also be used. (The number 1 is reserved for the primary bag of a whole blood collection set.)
qq	Specifies the identity of the container set manufacturer and is encoded and interpreted from the Manufacturer Identifier Codes table. Refer to Table RT015 on the ICCBBA website (ICCBBA.org).
wwwwwww	The manufacturer's catalog number. This must be interpreted from information provided by the manufacturer.

8.11.　　Data Structure 018: Container Lot Number

Data structure 018 is a 10 character alphanumeric data string that encodes the manufacturer's lot number for the container set. This data structure is not normally visible on the labelled blood component however the eye-readable bar code text may be visible.

&)xxxxxxxxxx	
&)	Data identifiers
xxxxxxxxxx	Container lot number (alphanumeric A–Z; a–z; 0–9)

9. Uniform Labelling Using ISBT 128

9.1.　　Bar Codes and Bar Code Text

The layout of the bar codes on collection, satellite or transfer containers will conform to the quadrant design as outlined in the ISBT 128 Standard: Technical Specification:

Upper Left:　　　Donation Identification Number (see ***Note***)
　　　　　　　　　Collection or Production Date and Time
Upper Right:　　ABO/Rh Blood Groups and Type of Donation/Intended Use
Lower Left:　　　Product Code
Lower Right:　　Expiration Date and Time
　　　　　　　　　Special Testing

Note: *In addition to the final ISBT 128 label, the Donation Number Label applied at collection is normally present on the component. This number is present for label control in the blood centre.*

The eye-readable representation of the bar code data content will appear directly beneath each bar code. The eye-readable text will include all of the data characters contained in the bar code symbol but will not include the data identifier (except for the Donation Identification Number) or start/stop characters.

The interpretation of the bar code content (e.g. blood group, collection and expiry date and time, special testing) will appear in eye-readable format below the bar code.

Dates will be printed in the format day month year. The day will be numerical, the month alphabetical, using a three-letter abbreviation. Refer to **Table 6** for the month abbreviations used in Canada. The year will be a four digit numerical representation.

Table 6: Month Abbreviations Used in Canada	
Canadian Blood Services	Héma-Québec
JAN	JAN
FEB	FEV
MAR	MAR
APR	AVR
MAY	MAI
JUN	JUN
JUL	JUL
AUG	AOU
SEP	SEP
OCT	OCT
NOV	NOV
DEC	DEC

Times will be printed based on a twenty-four hour clock with a colon placed between the hours and minutes.

9.2. Component Description

Additional label text providing a description of the component will appear in the bottom left quadrant below the product code bar code.

The order of component information presented on the labels varies between Canadian Blood Services and Héma-Québec. Refer to the label examples shown in Sections 9.4 and 9.5. The component description text (including font and font sizes) in these label examples may not represent the most current label.

9.3. Eye-readable Red Cell Phenotypes

Rules for printing of the eye-readable red cell phenotypes on the final label are as shown below:

Font type	Description	Comments
Regular font, Not underlined	One determination on a previous donation	Héma-Québec only
Regular font, Underlined	One determination made on the current donation	Héma-Québec only
Bold font, Not underlined	Two determinations made on two previous donations	
Bold font, Underlined	Two determinations, the second being on the current donation.	
Asterisk (*) following antigen	Indicates phenotype predicted by genotype testing	Héma-Québec only

Note 1: *A phenotype may appear in eye-readable text that is not encoded in the Special Testing bar code.*

Note 2: *The ellipsis "…" at the end of the eye-readable phenotype list indicates there was insufficient room to print all known phenotypes on the component label.*

9.4.   Canadian Blood Services Labels

Canadian Blood Services uses the standard 100 mm by 100 mm ISBT 128 Blood Component Label for all blood components. An example of a label for a Red Blood Cell component is shown in Figure 4.

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Figure 4: Canadian Blood Services ISBT 128 Label

9.4.1. Components for Transfusion

Component description information will be presented in the lower left portion of the label of components for transfusion in the order described below:

MODIFIER(S) (ENGLISH/FRENCH)
COMPONENT NAME (ENGLISH)
COMPONENT NAME (FRENCH)
ATTRIBUTE (ENGLISH/FRENCH)
ATTRIBUTE (ENGLISH/FRENCH)
ATTRIBUTE (ENGLISH/FRENCH)
Component Description (English/French)
Component Description (English/French
Component Description (English/French
Component Description (English/French)
Additional Test Results
Additional Test Results

- Modifiers include:
  - Apheresis
  - Washed
  - Frozen
  - Deglycerolized
  - Cryosupernatant
- Attributes, when applicable, will normally be presented in the following order:
  - Leukoreduction
  - Low Volume / Low Count
  - Divided
  - Irradiation
  - Other descriptors (e.g. container number)
- Component Description will normally be presented in the following order:
  - Component Volume
  - Nominal collection volume/anti-coagulant
  - Additive solution
  - Storage Conditions
  - Apheresis Platelet Count, when applicable
- Additional test results include:
  - Red Cell Antibody
  - Indication of Untested status for components distributed by Emergency Release and Untested Autologous donations
  - Indication of Subsequent Testing for Autologous donations
  - Volume of anticoagulant present in apheresis plasma/platelet components

9.4.2. Recovered Plasma for Further Manufacturing

Component description information will be presented in the lower left portion of the Recovered Plasma label in the order described below:

Volunteer Donor
COMPONENT NAME
CAUTION: FOR
MANUFACTURING USE ONLY
Component Volume, Nominal Collection Volume and Anticoagulant
Storage Conditions
Import for Export statement

The list of tests performed on the donation is printed in the lower right quadrant of the label.

9.4.3. Source Plasma for Further Manufacturing:

Component description information will be presented in the lower left portion of the Source Plasma label in the order described below:

COMPONENT NAME
CAUTION: FOR
 MANUFACTURING USE ONLY
Component Volume
Automated Procedure from Normal Donor
Storage Conditions
Import for Export statement
Anticoagulant volume

The list of tests performed on the donation is printed in the lower right quadrant of the label.

9.5. Héma-Québec Labels

Héma-Québec uses the standard 100 mm by 100 mm ISBT 128 Blood Component Label for all blood components. An example of a label for a Red Blood Cell component is shown in Figure 5.
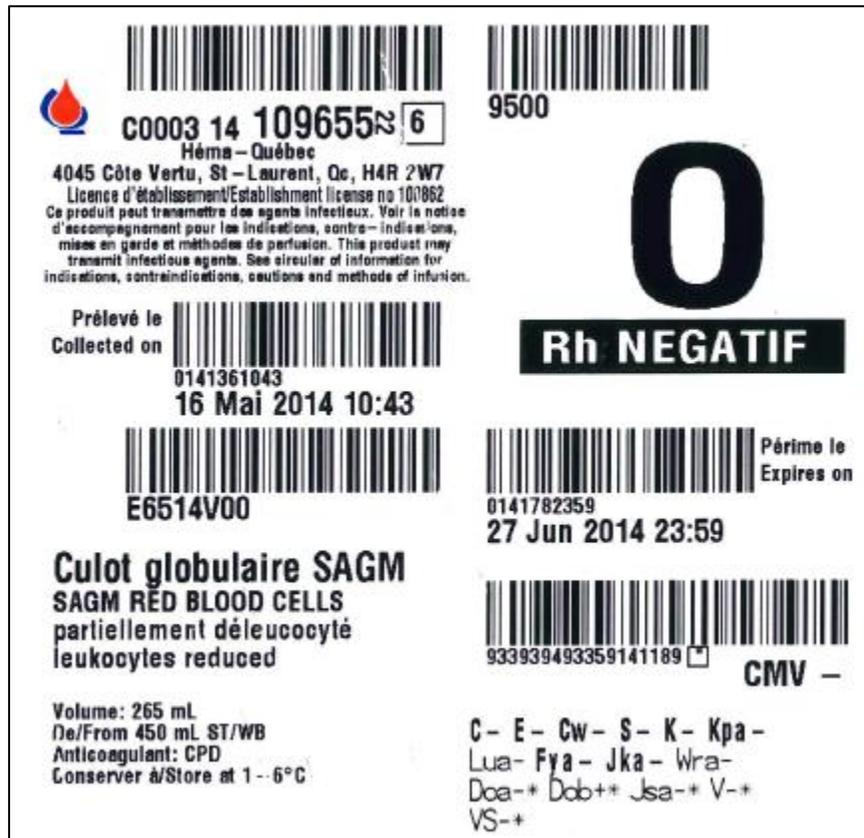

Figure 5: Héma-Québec ISBT 128 Label

9.5.1. Components for Transfusion

Because of the need for bilingual labels (French and English) with prevalence for French, the general principles for printing can be slightly different than what is suggested in the ISBT 128 documentation. Component description information will be presented in the lower left portion of the label of components for transfusion in the order described below:

Modifier(s), divisions or type of donation (French/English)
Component name (French)
COMPONENT NAME (ENGLISH)
attribute (French/English)
attribute (French/English)
attribute (French/English)
Component Description (French/English)
Component Description (French/English)
Component Description (French/English)
Component Description (French/English)
Component Description (French/English)

- Modifier(s), divisions or type of donation include:
    - Apheresis
    - Washed
    - Deglycerolized
    - Division number
    - Designated
    - International
- Component name (French and English)
    - Additive solutions for red blood cells are associated to the component name
    - The following modifiers may be associated to the component name
        - Washed
        - Deglycerolized
        - Frozen
- Component name (English)
    - Always printed in capital letters because the font size is smaller than the component name in French
- Attributes, when applicable, will normally be presented in the following order:
    - Leukoreduction
    - Low Volume
    - Irradiation
- Component Description will normally be presented in the following order:
    - Component Volume
    - Nominal collection volume
    - Anticoagulant
    - Storage conditions
    - Standard Apheresis Platelet Count

9.5.2.   Plasma for fractionation

Component description information will be presented in English only in the lower left portion of the Plasma label in the order described below:

Plasma for fractionation
CAUTION: FOR MANUFACTURING
USE ONLY
Component Volume, Nominal Collection Volume and Anticoagulant
Storage Conditions

9.5.3.   Apheresis Plasma for fractionation

Component description information will be presented in English only in the lower left portion of the Plasma label in the order described below:

**Apheresis
Plasma for fractionation**
CAUTION: FOR MANUFACTURING
USE ONLY
Component Volume
Storage Conditions
Automated method using
Anticoagulant used for the procedure

Appendix 1: Data Structure 002: Blood Groups

ABO and RhD Blood Groups	Default: Intended Use Not Specified	Directed (Dedicated/ Designated) Collection Use Only	For Autologous Use Only	For Autologous Use Only/ Biohazardous	Directed (Dedicated/ Designated) Collection/ Eligible for Crossover	Autologous Collection/ Eligible for Crossover
O RhD negative	95	91	97	98	94	96
O RhD positive	51	47	53	54	50	52
A RhD negative	06	02	08	09	05	07
A RhD positive	62	58	64	65	61	63
B RhD negative	17	13	19	20	16	18
B RhD positive	73	69	75	76	72	74
AB RhD negative	28	24	30	31	27	29
AB RhD positive	84	80	86	87	83	85
0	55	P2	P8	P9	P5	P7
A	66	A2	A8	A9	A5	A7
B	77	B2	B8	B9	B5	B7
AB	88	C2	C8	C9	C5	C7
para-Bombay, RhD negative	D6	D2	D8	D9	D5	D7
para-Bombay, RhD positive	E6	E2	E8	E9	E5	E7
Bombay, RhD negative	G6	G2	G8	G9	G5	G7
Bombay, RhD positive	H6	H2	H8	H9	H5	H7
O para-Bombay, RhD negative	I6	I2	I8	I9	I5	I7
O para-Bombay, RhD positive	J6	J2	J8	J9	J5	J7
A para-Bombay, RhD negative	K6	K2	K8	K9	K5	K7
B para-Bombay, RhD negative	L6	L2	L8	L9	L5	L7
AB para-Bombay, RhD negative	M6	M2	M8	M9	M5	M7
A para-Bombay, RhD positive	N6	N2	N8	N9	N5	N7
B para-Bombay, RhD positive	O6	O2	O8	O9	O5	O7
AB para-Bombay, RhD positive	Q6	Q2	Q8	Q9	Q5	Q7

Extracted from: ISBT 128 Standard Technical Specification
Table RT005: Data Structure 002: Blood Groups [ABO and RhD], Including Optional Type of Donation or Collection Information