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COMMITTEE OF EXPERTS ON THE TRANSPORT OF
DANGEROUS GOODS AND ON THE GLOBALLY
HARMONIZED SYSTEM OF CLASSIFICATION
AND LABELLING OF CHEMICALS

Sub-Committee of Experts on the
Transport of Dangerous Goods
(Twenty-second session, 2-6 December 2002
agenda item 5)

Sub-Committee of Experts on the Globally
Harmonized System of Classification and
Labelling of Chemicals
(Fourth session, 9-11 December 2002
agenda item 2)

GLOBAL HARMONIZATION OF SYSTEMS OF CLASSIFICATION
AND LABELLING OF CHEMICALS

Transmitted by the expert from the United States of America

1. At previous sessions of the Sub-Committee of Experts on the Transport of Dangerous Goods (TDG) and the Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), the expert from the United States of America indicated that a study had been initiated to evaluate concerns regarding possible confusion arising from using same diamond-shaped pictograms both for transport and for sectors other than transport under the GHS. The research study was later enhanced to consider the effectiveness of training; to determine whether emergency responders were able to differentiate between the transport and other sector GHS pictograms; and to assess the ability of emergency responders to recognize the meaning of the new pictograms without compromising their recognition and response to the existing transport labels. The study involved 135 emergency responder participants. An explanation of the rationale for the study, a description of the procedure and the results of the study are provided in Annex 1 of this document.

2. Emergency responders are currently trained to understand that a diamond-shaped pictogram (label) on packaging signals the presence of transport-regulated dangerous goods that require immediate attention and specific mitigation procedures in the event of a spill. With the implementation of the GHS, the fact that a label bears a pictogram with a diamond-shaped border will no longer necessarily mean that the packaging contains transport-regulated dangerous goods. Training will be needed to help emergency responders and other workers make the proper distinctions between hazards that are regulated in the transport sector and those that are not, and to take the appropriate actions with respect to hazards that are regulated in the transport sector (e.g., rejection of the shipment because it is not authorized for transport by passenger aircraft; segregation of dangerous goods packagings for shipping; or appropriate precautions taken by first responders).

3. Based on the results of the study summarized in Annex 1, the expert from the United States believes that clearer guidance in the GHS will facilitate appropriate distinctions between transport-regulated hazard classes and other hazard classes, and improve the overall comprehensibility of the system. Therefore, Annex 2 of this paper proposes amendments to Chapter 1.4 (Hazards Communication :Labelling) and Annex 6 (Examples of arrangements of the GHS label elements) of the GHS that are designed to:

- provide more specific guidance relative to the specifications for the GHS pictograms;
- provide more specific guidance on the placement of GHS pictograms;
- provide additional and more explicit examples of arrangements of the GHS label elements to provide better guidance and promote more accurate and consistent understanding of how the labels should appear on packagings; and,
- include specific provisions to promote clear differentiation between labels used in transport and those applied in other sectors.

The objectives of the proposed amendments are to improve the ability of persons who come into contact with chemical packagings in transport to differentiate between hazards that are regulated in the transport sector, and therefore trigger emergency response precautions, and hazards that do not trigger such a response. It is also envisioned that this improved guidance will result in more consistent implementation of the GHS for all sectors. Consistent implementation and clear guidance will result in more effective and simplified training. It will enhance comprehensibility, reducing potential confusion for all target audiences, and promote the safe transport, storage and use of chemicals.

Annex 1 - Summary of Results of the First Responder Comprehensibility Study for Transport and GHS Labels

This document summarizes the results of a comprehensibility study conducted with first responders on the existing transport labels and the proposed Globally Harmonized System (GHS) pictograms for chemical hazards. The report includes the rationale for the study, a summary of the procedure used, a summary of the major findings, and conclusions drawn from consideration of the research results and interactions with first responders. The original intention was to study both first responders and package handlers. However, the phase of the study involving transport workers from an air express package handling facility (e.g. sorters, handlers and acceptance personnel) was not conducted due to labour issues and scheduling difficulties that were not resolved in the time available.

Rationale for the Study

This study was designed to investigate the potential effects on responses to dangerous goods emergencies that may be precipitated by the presence of GHS pictograms on packagings of dangerous goods in addition to existing transport labels. The current transportation-emergency-response-system requires appropriate labelling on packagings that contain dangerous goods. First responders, such as fire fighters and other emergency response personnel, are trained to recognize these labels, among other cues, as a means of identifying potential chemical spill emergencies. Although the GHS incorporates the existing transport hazard labels, it also includes pictograms and label elements for hazards that are not currently included in transportation regulations, such as skin and eye irritation and chronic health effects. In most cases, chemicals classified and labelled for these additional effects will need to be transported. In many instances, the GHS labels will not be readily visible in transport because they will be placed on inner packagings. However, the GHS does not preclude the appearance of non-transport GHS pictograms on outer packagings. On single packagings, such as solid chemicals transported in bags or drums used for flammable liquids (e.g. paint), the GHS pictograms will clearly appear in addition to the transport labels where there are health or environmental effects that are not regulated in transport. Packages bearing GHS labels for chemical hazards that are not regulated for transport will be transported along with other packages that contain chemical hazards that are regulated for transport. Emergency responders will come into contact with GHS labels when responding to incidents in transport, warehouses, retail distribution centres and workplaces. This situation raises the concern that GHS labels for non-transport regulated chemical hazards may generate confusion among first responders.

While it is clearly important that users of chemicals be properly warned of potential hazards, a distinction can be made in terms of the nature of the hazard posed (e.g., acute versus chronic effects). Emergency response to transport incidents focuses on the acute or immediate hazards. Responses to transport incidents are typically conservative. Responders are trained to take extreme caution to ensure that they and the public are fully protected from potential harm. The GHS extends the scope of warnings to chemical hazards that do not pose the same immediate threat as those hazards regulated under the transport system. Signal words used in the GHS indicate the level of the hazard, and it is not expected that emergency responders need to respond to less severe hazards, such as skin and eye irritants, with the same caution as they do to the more acute hazards that are currently labelled in the transport system. Thus it appears helpful to evaluate whether the use of GHS pictograms in transport and other emergency response settings will confuse responders, cause them to be overly cautious in their response, or cause them to become desensitised to the labels.

The current transport hazard communication system uses labels on chemical packages as a binary signal. Diamond-shaped labels are a cue that the package is a hazard. First responders only need to detect the presence of a diamond-shaped label to know that a hazard is present. The training that first responders receive, and the entire dangerous goods response mechanism within a fire department, are predicated on this principle. With the introduction of GHS pictograms, the decision as to response may be more complicated. They will have to determine by the colour of the frame, the background colour, and the symbol, whether a transport-regulated hazard is present. The primary objective of the comprehensibility study was to determine the implications of these possible additional pictograms for emergency response.

The study was designed to investigate the reactions of first responders in potential emergency situations where they could be confronted with pictograms both for hazards covered in the transport sector and for hazards covered in other sectors by GHS pictograms. The study used a control group where participants were asked to respond to a series of photographs of transport packages, some of which bore the pictograms that now are required under the transport system and some of which bore no diamond-shaped pictograms. A second group was exposed to photographs that also contained some packages that carried GHS label information. A third group was also exposed to packages that had both transport and non-transport pictograms, however the non-transport GHS labels were reduced in size. Participants were asked to identify which packages contained chemicals that posed hazards that are regulated in the transport system, and which did not. They were also asked whether it would be necessary to implement emergency procedures in the event of a spill from the package.

Procedure Summary

First responders from the Cambridge and Somerville Massachusetts Fire Departments participated in the study. The fire fighters were given a training course prior to the testing and were provided with a chart of GHS pictograms that they were able to refer to during the testing exercise. The study was conducted at the fire department training centres. The 135 participants were divided into groups in which all participants of a particular group sat in a classroom and participated in the study at the same time. The researcher stood at the front of the room and projected information and visual stimuli onto a projection screen. Each participant was given a series of questionnaires to fill-out during the session, with the researcher leading the group through the process.

All of the groups followed the same general procedure. First, general demographic information was collected from each participant. Next, they were given a pretest that evaluated how well they comprehended the existing transport labels and proposed GHS pictograms. The pretest also evaluated their comprehension of the other elements of the GHS labels prior to receiving training explaining the meaning of the hazard pictograms and labels. Information gathered in the pretest was recorded. Following the pretest, a training session was provided that included a review of current transport labels, an explanation of the GHS classification system, a presentation of the GHS label elements including the pictograms, and a discussion of the labelling of dangerous goods for transportation under the GHS. The training session was immediately followed by a post-test to assess the effectiveness of the training. The final elements of the procedure included observation of 100 photographs of packages with various transport, GHS transport and non-transport pictograms, questions that assessed the participants' comprehension of the photographs and a general debriefing where participants general reactions to the GHS pictograms were discussed and recorded.

All of the 135 participants were shown 100 photographs of packages that included different types of labels. The control group, which consisted of 45 participants, viewed photographs showing packages with current transport labels (15 photographs) and packages without either transport or non-transport GHS labels (85 photographs). A second group of 45 participants viewed 15 photographs of packages bearing transport labels; 45 photographs of packages with GHS labels; 25 photographs of packages with neither current transport nor GHS labels; and 15 photographs with packages bearing a combination of

transport and GHS labels. A third group of 45 participants viewed 15 photographs of packages bearing transport labels; 45 photographs of packages with GHS labels that were one-fourth of the size of the transport labels; and 40 photographs of packages without transport or GHS labels.

The 15 transport labels bore the pictograms that now are required under the transport system. Most of the 45 GHS labels that were the same size as the transport labels, shown to the second group, included pictograms covered by the GHS that are not used in transport (i.e. dead fish and tree - 15, exclamation mark - 12, new health hazard symbol - 12), with an additional 3 of the GHS corrosive pictogram and 3 of the toxic hazard pictogram. The corrosive and toxic labels were added to convey the situation where the GHS pictograms would apply for purposes other than transport. There were 5 photographs which bore both an existing transport pictogram and a new GHS pictogram that is not used for transport. The small GHS labels included 15 each for skin and eye irritation (exclamation mark pictogram), chronic health hazards (using the proposed double exclamation mark pictogram), and environmental hazards (dead fish and tree pictograms). Label configurations, i.e. placement of the transport-regulated hazard pictograms and the GHS pictogram and label elements, varied.

Some participants were shown the chronic health hazard pictogram proposed by Sweden for chronic health hazards in the pretest phase of the study in order to gauge their reaction and the preliminary comprehensibility of this proposed pictogram. This pictogram was not used in any of the 100 photographs viewed by the study participants.

The photographs were projected onto a projection screen at the front of the room and were viewed one-at-a-time by the group. In the tests conducted at the Cambridge fire company (45 participants) the visual quality of each image was degraded by a random, high spatial frequency, opaque black filter that simulated a smoke filled environment. The images viewed by the Somerville fire fighters (90 participants) were not degraded. Participants were given a two-page document containing illustrations and guidance for all of the pictograms as a reference to use as a job aid. The participants were asked to answer two questions for each photograph in the series.

-They were asked to identify any transport or non-transport GHS labels and to indicate their meaning.

-They were also asked to indicate whether or not they believed special hazardous materials incident procedures or equipment would be needed to handle the package in an emergency situation.

Summary of Results

The 135 first responders who participated in the study ranged in age from the late twenties to mid fifties, and in experience from as little as 3 months to over 20 years. All participants were high school graduates, with some having completed advanced post-graduate degrees. All had corrected to normal vision, based on self-reports and normal colour vision as screened through a pre-employment physical exam.

The pretest that was conducted before training and testing resulted in the following observations:

- GHS pictograms containing symbols that are also used as transport labels were generally identified by the symbol (e.g., a GHS with a flame symbol was identified as marking something flammable).
- GHS pictograms with unique symbols (i.e., exclamation mark and double exclamation mark) were not as well understood.

- The fish & tree pictogram was often identified as environmentally-related.
- The exclamation mark and double exclamation mark symbols were often identified as indicating the need for attention, caution or warning, or as an indication of an 'unknown' danger in terms of quantity or type of hazard.
- Some responders indicated that the exclamation mark and double exclamation mark were intended to represent high, acute hazards even though pre-training thoroughly covered the health hazards for which these symbols were proposed in the GHS. Some participants concluded that the double exclamation mark symbol was meant to convey greater hazard, compared to the single exclamation mark.
- The health hazard pictogram proposed by Sweden was generally understood to indicate some type of human health hazard but some thought it meant a heart attack hazard.
- The elements of a GHS label (i.e., product name/identifier, signal word, hazard statement, precautionary information, supplemental information, pictogram, and supplier contact information) were generally understood and comprehensible.

The post-test following the training indicated that many of the participants had learned the meaning of previously unknown GHS pictograms. Some of the fire fighters made a number of errors with respect to being able to grasp the meaning of some of the GHS pictograms. The errors made were analyzed and can be categorized into three types of errors:

- Packages labelled with transport labels only were incorrectly identified as containing chemicals posing non-transport GHS hazards;
- Packages labelled with non-transport GHS pictograms were incorrectly identified as containing chemicals posing transport hazards;
- Packages labelled with both non-transport GHS labels and transport labels were incorrectly identified as containing chemicals posing only non-transport GHS hazards or only transport hazards.

The testing revealed the following results:

Among participants who viewed photographs in which packages were labelled with transport labels only (i.e. the packages included only pictograms for hazards covered in the transport sector consistent with the labelling requirements of the UN Model Regulations on the Transport of Dangerous Goods, or no pictograms) there was an approximately 92% comprehensibility success rate, defined as the ability to identify correctly which packages were regulated in transport and which were not. Participants who viewed photographs in which some packages also included GHS labels and pictograms had approximately an 82% comprehensibility success rate when the non-transport GHS pictograms were the same size, and a 90% success rate when the non-transport GHS pictograms were of a reduced size as compared to the transport labels. Thus, the comprehensibility success rate improved when the smaller size non-transport GHS pictograms were used.

In terms of determining correctly which packages required emergency response (calling in the hazmat response team), participants who viewed photographs in which non-transport GHS pictograms were approximately the same size as the pictograms for hazards regulated in transport did not perform as well as those who viewed photographs in which the non-transport hazard pictograms were significantly smaller than the transport pictograms. Those who viewed photographs in which the non-transport GHS pictograms were significantly smaller than the transport hazard pictograms performed almost as well as

those who viewed photographs that did not include any packages with pictograms for non-transport GHS hazards. The results were as follows:

- Transport labels only: 85% correct.
- Transport labels and large non-transport GHS pictograms: 69% correct.
- Transport labels and small non-transport GHS pictograms: 82%.

Discussion & Conclusions

The overall pattern of results appears to indicate that if effective training is provided, transport labels and GHS pictograms can be correctly identified by first responders in all of the conditions studied. Performance in identifying transport hazards decreased somewhat when both non-transport GHS pictograms and transport pictograms were present. However, the comprehensibility success rate and appropriate responses to the labelled hazards improved when the non-transport GHS pictograms were of a reduced size as compared to the transport pictograms. Thus, limiting the size of non-transport GHS pictograms relative to the transport pictograms where both must appear on a single packaging may help to minimize confusion on the part of emergency responders. In addition, to the extent that non-transport pictograms do not appear on outer packagings, there would be no possibility for confusion. Consistency in application of GHS pictograms and labels will facilitate training and comprehension and advance the ultimate goal of harmonizing chemical hazard communication.

It should be noted that the retention of the information learned in training was not evaluated due to time constraints. In this study, the Cambridge fire fighters were tested one week after being trained on the new GHS hazard communication requirements, and the Somerville fire fighters were trained on the same day as the testing. In practice emergency responders may experience long periods of time between when they are trained and when they are actually confronted with a chemical packaging. For this reason, the differences between transport and non-transport hazard labels in the GHS should be clear, and the distinctions simple and easy to recall.

Annex 2**Proposed Amendments to the GHS Guidance on the Use of Pictograms in Part 1**

Note: The proposed amendments are based on the text provided in the INF.5 documents provided at the third session of the GHS Sub-Committee.

Amend Part 1, paragraph 1.4.10.3 to read as follows:

1.4.10.3 GHS hazard communication symbols

The following hazard symbols are used in the GHS. With the exception of the [serious health hazard symbol], the exclamation mark, and the fish and tree, they are part of the standard symbol set used in the UN Model Regulations on the Transport of Dangerous Goods. The symbols are intended to be used for hazard communication for all sectors including transport, worker safety, environmental protection and consumer protection. The exclamation mark symbol and the [serious health hazard symbol] are not expected to be used in the transport sector. These symbols indicate hazard classes and categories that are not currently labelled in the transport system and, consistent with the building block approach, they would not be required to be covered for transport in the future.

Amend the heading of paragraph 1.4.10.4.1 to read “*Shape, colour and size*”

Amend paragraph 1.4.10.4.1.1 through 1.4.10.4.1.3 and add a new paragraph 1.4.10.4.1.4 to read as follows:

1.4.10.4.1.1 All hazard pictograms used in the GHS should be in the shape of a square set at an angle of 45° (diamond shaped).

1.4.10.4.1.2 For transport, the pictograms (*commonly referred to as labels in transport regulations*) prescribed by the UN Model Regulations on the Transport of Dangerous Goods should be used. The UN Model Regulations prescribe transport pictogram specifications including colour, symbols, size, background contrast, additional safety information (e.g. hazard class) and general format. Transport pictograms are required to have minimum dimensions of 100 mm by 100 mm, with some exceptions for allowing smaller pictograms for very small packagings and for gas cylinders. Transport pictograms include the symbol in the upper half of the label. The UN Model Regulations require that transport pictograms be printed or affixed to a packaging on a background of contrasting colour. An example showing a typical label for a flammable liquid hazard according to the UN Model Regulations is provided below:



Pictogram for flammable liquid in the UN Model Regulations (Symbol: Flame: Black or White; Background: red; Figure 3 in bottom corner; minimum dimensions 100 mm x 100 mm.)

1.4.10.4.1.3 GHS pictograms not required for the transport sector according to the UN Model Regulations on the Transport of Dangerous Goods should have a black symbol centred on a white background placed within a red diamond-shaped border that is sufficiently wide to be clearly visible. They should be readily legible, easily distinguished from the background colour and should be accompanied by the other GHS hazard communication label elements (signal word, hazard statements, precautionary statements, product identifier) on a GHS label (*the combination of these elements on a rectangular bordered background is referred to as the GHS label, see figure x-x*). If the GHS label is expected to be visible on packaging intended for transport, GHS pictograms not used for the transport sector should be of a size that is readily legible but significantly smaller than the transport labels referred to in paragraph 1.4.10.4.1.2. The smaller size, red border and other feature differences are necessary in order to minimize the possibility that they could be confused with hazards covered in the transport sector. An example of a GHS pictogram used for a skin irritant is provided below.



Pictogram for skin irritant (Symbol: Exclamation mark: black; Background: white; Border: red; Size: Should be large enough to be clearly visible but significantly smaller than transport hazard pictograms (i.e. on the order of 25 mm x 25 mm))

1.4.10.4.1.4 GHS symbols that are not specifically intended for the transport audience should, when practical, appear only on GHS labels that are placed on inner packagings (see examples in Annex 6). When it is not possible to apply the non-transport GHS pictograms on an inner packaging (i.e. the packaging is a single packaging such as a bag or drum), they may be displayed on the outer packaging as shown in the examples provided in Annex 6, and in such cases it is desirable and generally expected that they will be readily legible, but significantly smaller than the transport hazard labels, while proportional to the size of the GHS label text.

Amend 10.4.10.5.1 to read as follows:

10.4.10.5.1 Where a transport pictogram required by the UN Model Regulations on the Transport of Dangerous Goods appears on a GHS label, a GHS pictogram for the same hazard should not appear. The examples provided in Annex 6 provide guidance on applying GHS pictograms in all sectors. The exclamation point and [serious health hazard symbol] pictograms should not be displayed on freight containers, portable tanks, bulk packagings, road vehicles or railway wagons/tanks. The UN Model Regulations on the Transport of Dangerous Goods require placards that are enlarged labels for hazard communication on these types of large chemical containment systems that are used for transport.

Paragraph 10.4.10.5.2(c)

Paragraph 10.4.10.5.2(c) refers to precautionary statements and pictograms but does not provide useful information relative to the placement of pictograms on the label. Paragraph (c) should be amended to include information about the pictogram since the pictogram should be placed on the label for workplace and consumer purposes. This is consistent with the information in 1.4.10.5.4.1. Amend paragraph (c) by adding the following sentence:

“For purposes other than transport, the GHS pictogram described in 1.4.10.4 should appear on the GHS label in conjunction with the other GHS label elements. If the transport hazard pictogram for the same hazard class is readily visible on the packaging surface, then it is not necessary to include it as part of the GHS label. The pictogram should be clearly visible and appear in a prominent location on the GHS label, as shown below:



PAINT (2-METHYL FLAMMALINE, LEAD CHROMOMIUM)		UN1263
		CAS# XXXX-XX-X
	DANGER Highly flammable liquid and vapour. Keep away from heat and ignition sources.	
	Causes damage to the liver and kidneys through prolonged or repeated exposure to the skin. Keep away from food and drink. Wash hands thoroughly after use and before eating.	
First aid: Wash affected area of body thoroughly with soap and fresh water. Great Lake Paints Inc., Columbus, Ohio, USA. Telephone 999 999 9999		

Figure x-x
Example of a GHS label

Transport pictograms may be shown on the packaging or on the GHS label. An example of a GHS label where the transport pictogram is included as part of the GHS label is shown in the example below:



PAINT (METHYL FLAMMALINE, LEAD CHROMOMIUM)	
DANGER Highly flammable liquid and vapour. Keep away from heat and ignition sources	
 Causes damage to the liver and kidneys through repeated exposure to the skin. Keep away from food and drink. Wash hands thoroughly after use and before eating.	
First aid: Wash affected area of body thoroughly with soap and fresh water. Great Lake Paints Inc., Columbus, Ohio, USA. Telephone 999 999 9999	

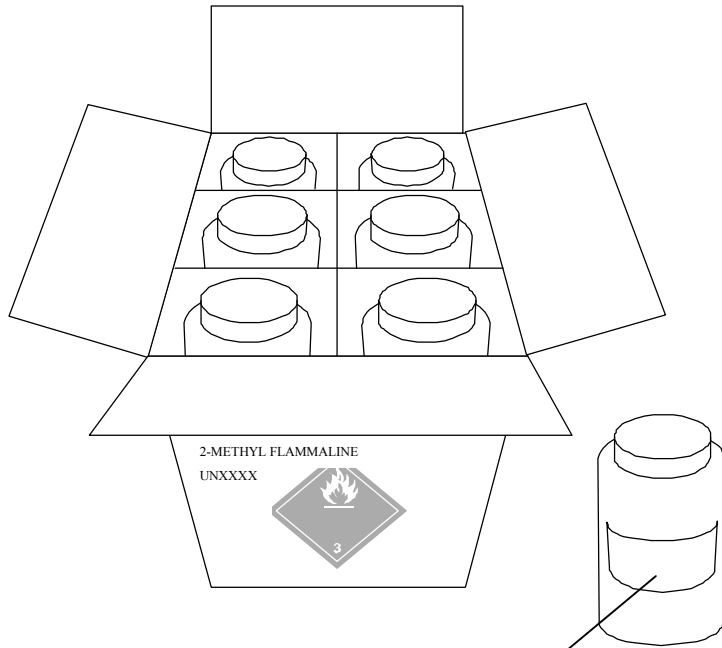
Figure x-y
Example of a GHS label


Proposed Amendments to Annex 6

Replace the examples in Annex 6 with the following (the secretariat should number these appropriately for easy reference):

Example: Combination Packaging for a Category 2 Flammable Liquid

Outer Packaging: Box with a flammable liquid transport label
Inner Packaging: Plastic bottle with GHS hazard warning label

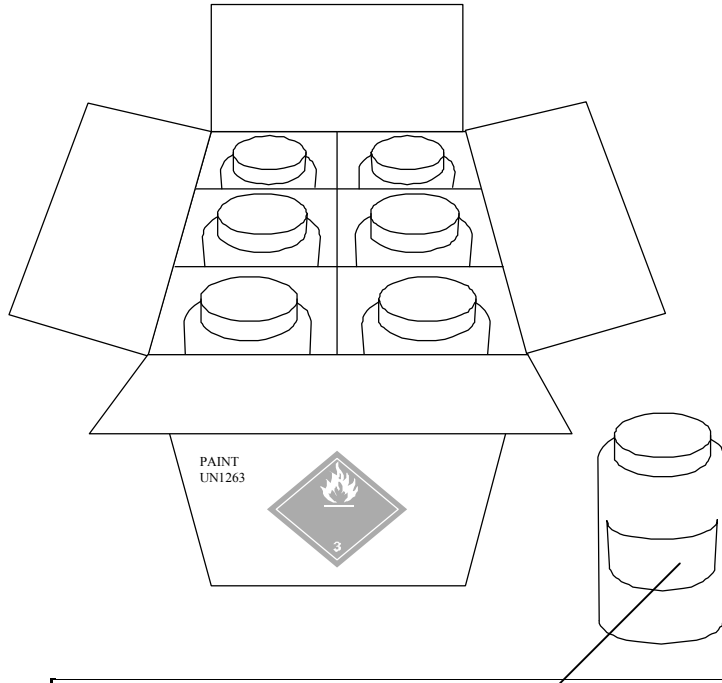


2-METHYL FLAMMALINE	UNXXXX CAS# XXXX-XX-X
	DANGER Highly flammable liquid and vapour. Keep away from heat and ignition sources.
First aid: Obtain medical attention immediately if ingested. Do not induce vomiting.	
Akron Chemical Co., Akron, NWT, Canada. Telephone (888) 888-8888	

Example: Combination Packaging for a Category 1 Target Organ/Systemic Toxicant and Category 2 Flammable Liquid

Outer Packaging: Box with a flammable liquid transport label

Inner Packaging: Plastic bottle with GHS hazard warning label



PAINT (FLAMMALINE, LEAD CHROMOMIUM)

UN1263

CAS# XXXX-XX-X



DANGER

Highly flammable liquid and vapour.
Keep away from heat and ignition sources.



Causes damage to the liver and kidneys through prolonged or repeated exposure to the skin.

Keep away from food and drink.

Wash hands thoroughly after use and before eating.

First aid:

Call emergency medical care.

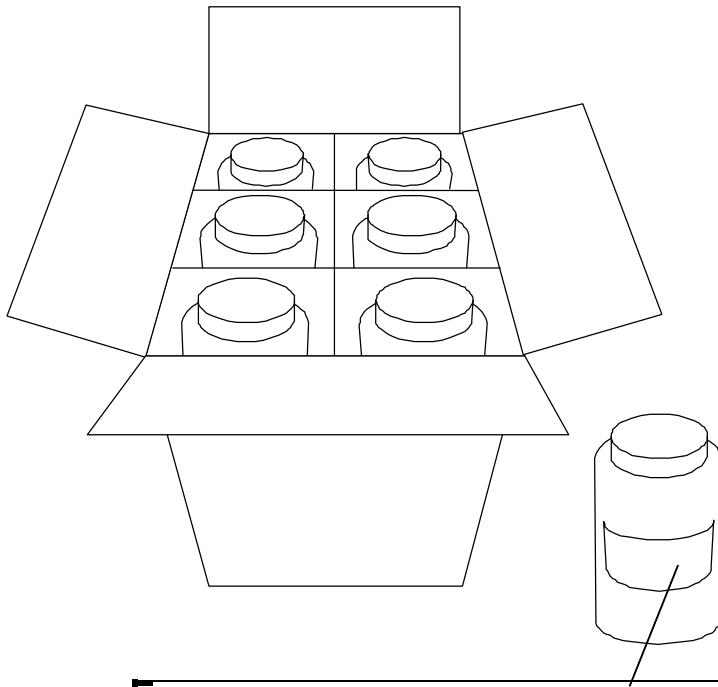
Wash affected area of body thoroughly with soap and fresh water.

Great Lake Paints Inc., Columbus, Ohio, USA. Telephone 999 999 9999

Example: Combination Packaging for a Category 2 Skin Irritant and Category 2A Eye Irritant

Outer Packaging: Box with no label required for transport

Inner Packaging: Plastic bottle with GHS hazard warning label



BLAHZENE SOLUTION

CAS# XXXX-XX-X



WARNING

Causes skin irritation.

Causes serious eye irritation.

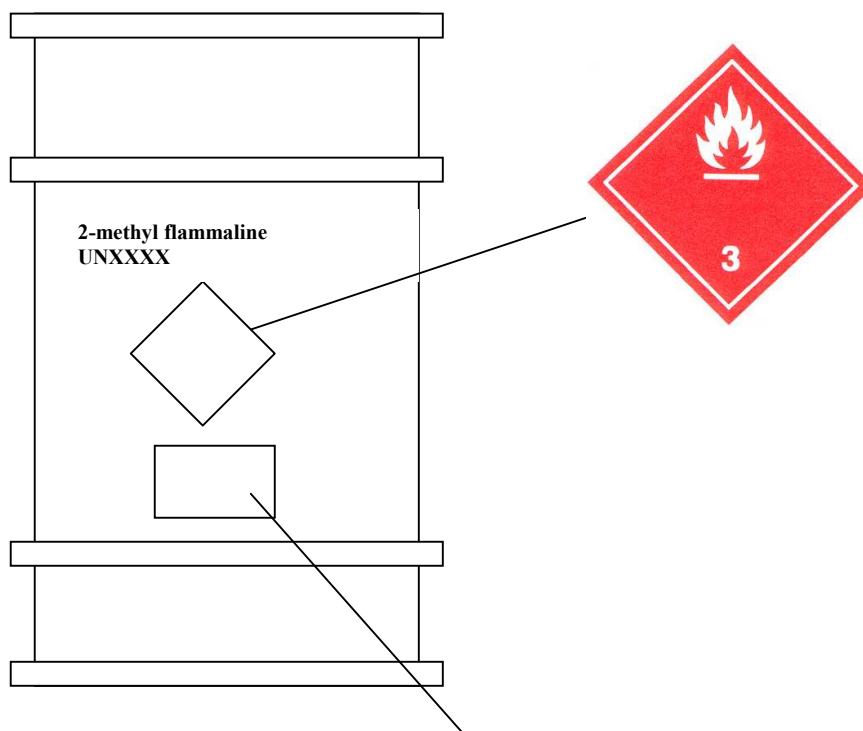
First aid:

Flush with fresh water if contact with skin or eyes.

If irritation develops and persists, get medical attention.

Great Lake Paints Inc., Columbus, Ohio, USA. Telephone 999 999 9999

Example Single Packaging for a Category 2 Flammable Liquid



2-METHYL FLAMMALINE

UNXXXX
CAS# XXXX-XX-X

DANGER

Highly flammable liquid and vapour.
Keep away from heat and ignition sources.

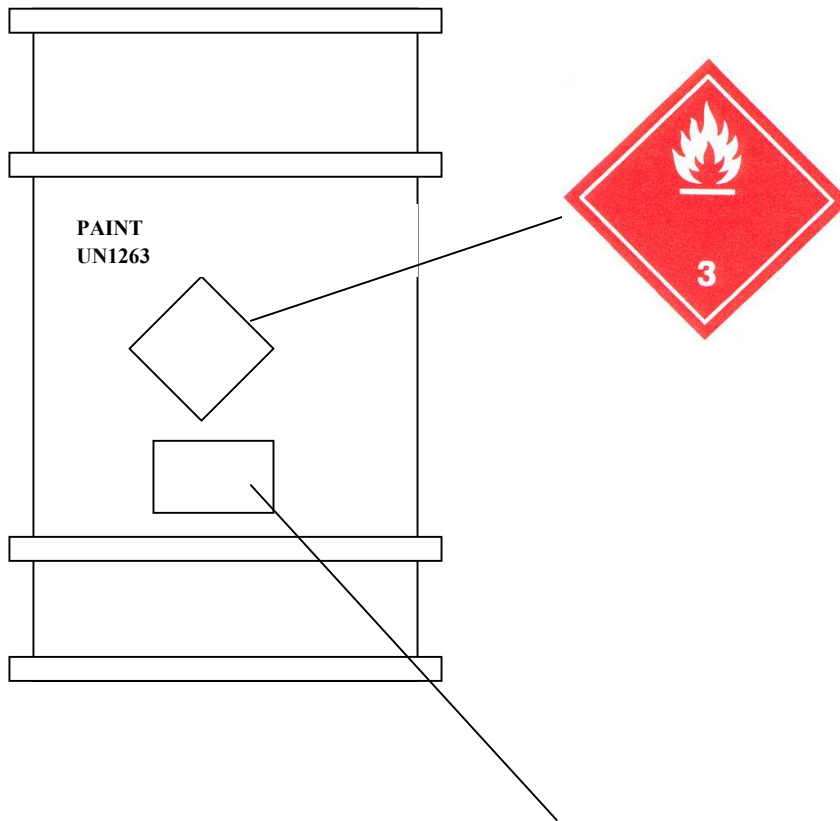
First aid:

Obtain medical attention immediately if ingested.
Do not induce vomiting.

GHS Example Company, Akron, NWT, Canada.

Telephone (888) 888-8888

Example Single Packaging for a Category 1 Target Organ/Systemic Toxicant and Category 2 Flammable Liquid



**PAINT (METHYL FLAMMALINE,
LEAD CHROMOMIUM)**

UN1263

CAS# XXXX-XX-X



DANGER

Causes damage to the liver and kidneys through prolonged or repeated exposure to the skin.

Keep away from food and drink.

Wash hands thoroughly after use and before eating.

Highly flammable liquid and vapour.

Keep away from heat and ignition sources.

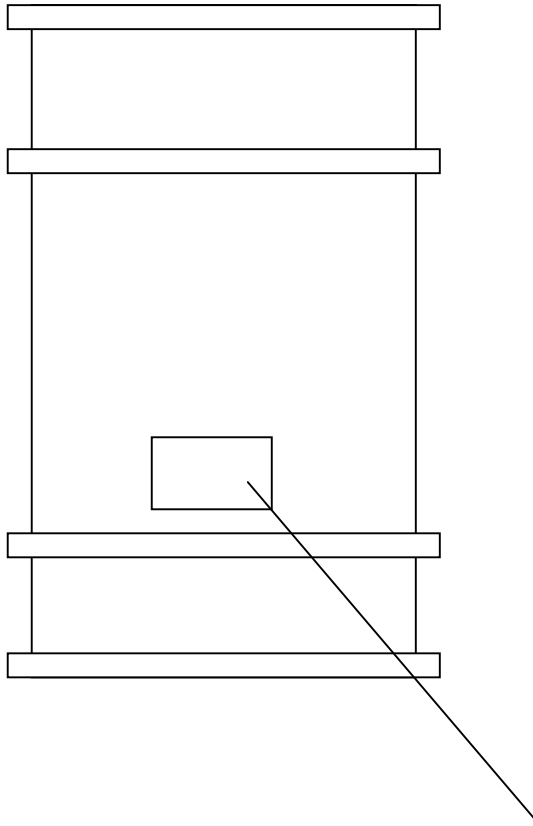
First aid:

Call emergency medical care.

Wash affected area of body thoroughly with soap and fresh water.

Great Lake Paints Inc., Columbus, Ohio, USA. Telephone 999 999 9999

Example: Single Packaging for a Category 2 Skin Irritant and Category 2A Eye Irritant



BLAHZENE SOLUTION

CAS# XXXX-XX-X



WARNING

Causes skin irritation.

Causes serious eye irritation.

First aid:

Flush with fresh water if contact with skin or eyes.

If irritation develops and persists, get medical attention.

Great Lake Paints Inc., Columbus, Ohio, USA. Telephone 999 999 9999