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Distr. GENERAL

ST/SG/AC.10/C.4/2004/8/Rev.1 24 September 2004

Original: ENGLISH

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

<u>Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals</u>

Eight session, 6-9 December 2004 Item 3 (a) of the provisional agenda

DEVELOPMENT OF GUIDANCE FOR IMPLEMENTATION

Precautionary Statements (PS)

Transmitted by the expert from Germany

INTRODUCTION

1. At its fourth session in December 2002, the Sub-Committee decided to set up a Correspondence Group on Precautionary Statements (ST/SG/AC.10/C.4/8, para. 27), the objective of which would be to derive advice on how to avoid hazards indicated by GHS hazard statements or to respond to incidents.

ATTENDANCE

- 2. Experts from Australia, Austria, Belgium, Canada, Denmark, Germany, Italy, Japan, the Netherlands, the United States of America; the Commission of the European Communities (CEC) and the International Programme on Chemical Safety (WHO/ILO/UNEP) have been participating in the correspondence group.
- 3. Representatives of the following non-governmental organizations took part in the discussion of items of concern to their organizations: European Chemical Industry Council (CEFIC), Dangerous Goods Advisory Council (DGAC), International Association of the Soap, Detergent and Maintenance Products Industry (AISE), American Chemistry Council (ACC), International Council of Chemical Associations (ICCA), International Organization for Standardization (ISO), Soap and Detergent Association (SDA).

STARTING POINT

4. Whereas several existing systems with sets of phrases are documented, the IPCS International Chemical Safety Card (ICSC) Compilers Guide, the American National Standards (ANSI Z129.1) and the EU labelling system (S-phrases) have been used as the major information sources for the selection of precautionary statements covering most of those used by other systems.

REPORTING

- 5. The current status of discussions within the Correspondence Group has been reported to the Sub-Committee at its fifth (UN/SCEGHS/5/INF.5) and sixth sessions (UN/SCEGHS/6/INF.2 and INF.9). The Sub-Committee took note of the progress and the interim decisions on the lines of further development of the guidance as proposed by the group (ST/SG/AC.10/C.4/10, paras. 13, 14, 17, Annex 3 and ST/SG/AC.10/C.4/12, paras. 34 to 37, Annex 3). In particular, it was decided that the text for precautionary statements would be a revision of current Annex 3 of the GHS.
- 6. A complete revision of Annex 3 (ST/SG/AC.10/C.4/2004/8) was submitted for discussion at the seventh session by the expert from Germany. The Sub-Committee also took note of a WHO/IPCS Expert Workshop held in Freiburg (23-25 June 2004) at which the GHS was discussed among experts from five WHO regions with experience in the management of poisoning and poisons centre operations (UN/SCEGHS/7/INF.25). This Workshop provided an opportunity to review in detail the proposals of Annex 3. After consideration of additional comments and in expectation of further advice from the representative of WHO the Sub-Committee decided to wait for a resubmission of an amended proposal at the next session by the Chair of the Correspondence Group (ST/SG/AC.10/C.4/14, paras. 43 to 45).

SCOPE OF WORK

- 7. Precautionary statements have been linked with the hazard classes and categories of the GHS. Harmonization of existing precautionary statements has been undertaken in a way to maintain flexibility allowed for the language and combination of words used by the manufacturer/user or prescribed by competent authorities.
- 8. As guidance, a set of commonly used precautionary statements included in the proposed revised Annex 3 to the GHS document will promote greater convergence of the hazard communication elements of existing systems, greater consistency in the application of precautionary statements, and improved understanding of label phrases.
- 9. The proposed guidance is regarded as a living document subject to further development and refinement. Whereas the set of statements as proposed in the matrix section is regarded as comprehensive for the time being, further options could be elaborated to take the properties of products and their intended or foreseeable uses into account.

PROPOSAL

The Sub-Committee is invited to consider:

(1) replacing the current GHS Annex 3 with the revised Annex,

and

(2) amending the fourth and fifth sentences of GHS Section 1.4.6.2 to read: "Although precautionary statements have not been fully harmonized in the current GHS, Annex 3 of this document provides guidance to aid in the selection of appropriate statements. Additional work to achieve greater standardization in this area may be undertaken in the future, once countries have gained experience with the system."

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Annex

Annex 3

PRECAUTIONARY STATEMENTS AND PRECAUTIONARY PICTOGRAMS

A3.1 Preface

This Annex provides guidance on the use of precautionary statements consistent with the GHS, including advice on the selection of appropriate statements for each GHS hazard class and category. Precautionary statements should appear on GHS-consistent labels along with the GHS-harmonized hazard communication elements (pictograms, signal words, and hazard statements). Additional supplemental information, such as directions for use, may also be provided at the discretion of the manufacturer/distributor and/or competent authority (see Chapter 1.2 and in Chapter 1.4, the section 1.4.6.3).

A **Precautionary statement** is a phrase (and/or pictogram) that describes recommended measures that should be taken to minimize or prevent adverse effects resulting from exposures to a hazardous product, or improper storage or handling of a hazardous product (para 1.4.10.5.2(c)).

Existing precautionary statements have been used to the maximum extent as the basis for the development of this Annex. These existing systems have included the IPCS International Chemical Safety Card (ICSC) Compilers Guide, the American National Standards (ANSI Z129.1), the EU classification and labelling directives, the North American Emergency Response Guidebook (ERG 2004), and U.S. Environmental Protection Agency Label Review Manual.

The annex includes four types of precautionary statements covering: **prevention**, **response** in cases of accidental spillage or exposure, **storage**, and **disposal**. The development of the set of precautionary statements has been linked as far as possible to each GHS hazard statement and type of hazard.

The goal of this Annex is to promote a more consistent use of precautionary statements as shown in the attached matrix. By linking these statements to the hazard statements of the GHS, an improved understanding about appropriate precautionary behaviour is also made possible. Use of the matrix given in the annex enables the key concepts and approaches to be emphasized in training and education activities.

The guidance for assigning the phrases in the annex has been developed to provide the essential minimum phrases linking precautionary statements with relevant GHS hazard classification criteria and type of hazard. As much redundancy as possible has been removed in the wording of existing phrases in order to simplify them as much as possible.

The annex should be seen as a living document and therefore subject to further refinement and development over time. The basic concepts of the matrix and the philosophy given below will remain.

A3.2 Scope of Application

Hazard communication is the key means of enabling appropriate precautionary behaviour in users/consumers when handling hazardous substances and mixtures. Recognition and definition of the hazards are the first steps in ensuring safe use, storage and disposal of chemicals. Safety actions are necessarily linked to the type of hazard that exists, e.g., flammable liquids should be stored away from ignition sources. By making this link as explicit as possible, the introduction of precautionary statements into the GHS will reinforce safe handling procedures. Clear plain language is necessary to convey instructions and enable their translation into languages other than English.

The starting point for assigning precautionary statements is the hazard classification of the chemical product. The system of classifying hazards in the GHS is based on the intrinsic properties of the chemicals involved (paragraph 1.3.2.2.1). In some systems, however, labelling may not be required for chronic hazards on consumer product labels, if information shows that the respective risks can be excluded under conditions of normal handling, normal use or foreseeable misuse (see Annex 4). If certain hazard statements are not required then the corresponding precautionary statements are also not necessary (paragraph A4.1.1).

The precautionary statements included in the following matrix cover general emergency response and first-aid. For some specific chemicals, supplementary first aid, treatment measures or specific andidotes or cleansing materials may be required. Poisons Centres and/or medical practitioners or specialist advice should be sought in such situations and included on labels.

A3.3 Allocation of Precautionary Statements

This Annex sets out a matrix which guides the selection of appropriate precautionary statements. It includes elements for all categories of precautionary action. All specific elements relating to particular hazard classes should be used. General elements not linked in particular to a certain hazard class or category should also be used.

To provide flexibility in the application of precautionary phrases, a combination of statements is encouraged to save label space and improve the readability of phrases. Combination of phrases can also be useful for different types of hazard where the precautionary behaviour is similar, e.g. "Keep away from heat, sparks, and open flame and store in a cool well ventilated place".

A3.4 General Precautionary Measures

General precautionary measures should be adopted for all substances which are classified as hazardous to human health or the environment. To that effect, the need and information sources of three groups of users or applicators can be taken into account: the general public, the commercial user, and the industrial worker.

The presumed observation of precautionary label information, specific safety guidelines, and the safety data sheet for each product before use are part of the labelling requirements and occupational health and safety procedures.

Commercial use means the use of chemicals for private enterprise purposes. As commercial settings may include family-run operations, access of children must be excluded for commercial products.

In order to correctly implement precautionary measures concerning prevention, response, storage and disposal, it is also necessary to have information on the composition of products at hand, so that information shown on the container, label and safety data sheet can be taken into account when asking for further specialist advice.

The following general precautionary measures on the GHS label are appropriate under the given conditions:

General public	GHS Label, Supplemental Label Information	Keep out of reach of children. Read label before use. If medical advice is needed: Have product container or label at hand.
Commercial user	GHS Label, Supplemental Label Information, Safety Data Sheet	Keep out of reach of children. Read directions/label/Safety Data Sheet before use. If medical advice is needed: Have product container/label/Safety Data Sheet at hand.
Industrial worker	GHS Label, Supplemental Label Information, Safety Data Sheet, Workplace Instructions	none of the above

A3.5 Structure of the Precautionary Statements Matrix

Clear plain language is essential to convey information on precautionary behaviour. However, it is not necessary to insist on identical sets of words in all situations.

The tables making up the matrix show the **core part of the precautionary statements in bold print.** Derogations from the recommended labelling requirements are at the discretion of competent authorities. In circumstances where flexibility and variation are appropriate, this is denoted by use of a backslash or diagonal mark [/], the insert *such as* or the use of *italics*.

The inclusion of a backslash or diagonal mark indicates that a choice needs to be made between the words they separate, e.g. "... in accordance with local/regional/national/international regulation" could read "... in accordance with <regulations to comply with>.". In these cases, the manufacturer or supplier can choose or competent authorities may prescribe the most appropriate phrase.

Where conditions given in *italics* are combined with "such as" they denote the situations which should be specifically mentioned, e.g. "Keep away from *ignition sources such as* heat/sparks/open flame" could read "Keep away from heat, sparks, and open flame". Other ignition sources may be mentioned. In such cases, care should be used when considering the form and type of the substance. Appropriate guidance should be used which is relevant to the conditions highlighted, e.g. physico-chemical properties, type of formulation, or specific applications and which may give rise to the particular hazard e.g. flammability.

During the development of the matrix, some assumptions have been made in order to rationalize the application of the relevant precautionary statement.

In the majority of cases, different phrases are independent, e.g. the phrases for explosive hazard do not modify those related to certain health hazards and products that are classified for both hazard classes should bear appropriate precautionary statements for both.

Where a substance is classified according to a number of different types of health hazard, generally the most stringent set of precautionary statements should be selected. This applies mainly for the preventive measures. With respect to phrases concerning "Response", rapid action may be crucial. For example, if a chemical is carcinogenic and acutely toxic then the first aid measures for acute toxicity will take precedence over those for longer term effects. In addition, medical attention to delayed health effects

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may be required in cases of incidental exposure, even if not associated with immediate symptoms of intoxication.

To protect people with different reading abilities, it might be useful to include both phrases and pictograms for precautionary measures because information should be conveyed in more than one way (paragraph 1.4.4.1 (a)). It should be noted, however, that the protective effect of pictograms is limited and the examples in Annex 3 do not cover all precautionary aspects to be addressed.

< A3.6 Matrix of Precautionary Statements by Hazard Class/Category>

<A3.7 Precautionary Pictograms > to be kept as it stands now.

EXPLOSIVES

(Chapter 2.1)

Symbol Exploding Bomb

Hazard Category

Signal Word

Hazard Statement

Division 1.1 Division 1.2 Division 1.3 Danger Danger Danger

Explosive; mass explosion hazard Explosive; severe projection hazard Explosive; fire, blast or projection hazard



Precautionary Statements				
Prevention	Response	Storage	Disposal	
Keep away from ignition sources such as heat/sparks/open flame No smoking. Do not subject to rough handling such as grinding/shock/friction.	In case of fire:. Evacuate area and fight fire remotely due to the risk of explosion.	Store (in accordance with local/regional/national/international regulation).	Dispose of this material/its container (in accordance with local/regional/national/international regulation).	
Wear face protection. as specified by the manufacturer or the compentent authority.				
Keep wetted with appropriate material specified by the manufacturer or the compentent authority if drying out increases explosion hazard. Example: nitrocelluloses				
Ground/Bond container and receiving equipment if electrostatically sensitive material is for reloading.				

EXPLOSIVES

(Chapter 2.1)

Symbol None

Hazard Category Division 1.4

Signal Word Warning **Hazard Statement**Fire or projection hazard

Precautionary Statements				
Prevention Response Storage Disposal				
Keep away from ignition sources such as heat/sparks/open flame No smoking. Do not subject to rough handling such as grinding/shock/friction.	In case of major fire and large quantities: Evacuate area and fight fire remotely due to the risk of explosion.	Store (in accordance with local/regional/national/international regulation).	Dispose of (in accordance with local/regional/national/international regulation).	

EXPLOSIVES (Chapter 2.1)

Symbol	
None	

Hazard Category Division 1.5

Signal Word Warning

Hazard Statement May explode in fire.

Precautionary Statements				
Prevention Response Storage Disposal				
Keep away from ignition sources such as heat/sparks/open flame No smoking.	In case of major fire and large quantities: Evacuate area and fight fire remotely due to the risk of explosion.	Store (in accordance with local/regional/national/international regulation).	Dispose of this material/its container (in accordance with local/regional/national/international regulation).	

FLAMMABLE GASES

(Chapter 2.2)

Symbol Flame



Hazard Category

Signal Word Danger **Hazard Statement** Extremely flammable gas

Precautionary Statements				
Prevention	Response	Storage	Disposal	
Keep away from ignition sources such as heat/sparks/open flame No smoking. * Use explosion-proof electrical/ventilating/lighting/ equipment other specified by the manufacturer or the compentent authority. * Take precautionary measures against static discharge.	Leaking gas fire: Do not extinguish, unless leak can be stopped safely. Eliminate all ignition sources if safe to do so.	Store in well-ventilated place.		

^{*} if likely to be used commercially.

FLAMMABLE GASES

(Chapter 2.2)

Symbol	
None	

Hazard Category 2

Signal Word Warning

Hazard Statement Flammable gas

Precautionary Statements					
Prevention Response Storage Disposal					
Keep away from ignition sources such as heat/sparks/open flame No smoking.	Leaking gas fire: Do not extinguish, unless leak can be stopped safely. Eliminate all ignition sources if safe to do so.	Store in well-ventilated place.			

FLAMMABLE AEROSOLS

(Chapter 2.3)

Symbol Flame



Hazard Category

Signal Word

Hazard Statement

1 2 Danger Warning Extremely flammable aerosol Flammable aerosol

Precautionary Statements				
Prevention	Response	Storage	Disposal	
Pressurized container: Do not pierce or burn, even after use. Do not spray on an open flame or any white-hot material.		Protect from sunlight and do not expose to temperatures exceeding 50 °C/122 °F.	Dispose of this material and its container to (in accordance with local/regional/national/international regulation).	
Keep away from ignition sources such as heat/sparks/open flame No smoking.				

OXIDIZING GASES

(Chapter 2.4)

Symbol	
lame over circle	

Hazard Category 1

Signal Word Danger

Hazard Statement

May cause or intensify fire; oxidizer



Precautionary Statements				
Prevention Response Storage Disposal				
Keep away from combustible materials. * Keep reduction valves free from grease and oil.	In case of fire, stop leak if safe to do so.	Store in well-ventilated place.		

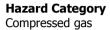
if likely to be used commercially.

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GASES UNDER PRESSURE

(Chapter 2.5)

Symbol Gas cylinder



Liquefied gas

Dissolved gas

Signal Word Warning

Warning

Warning

Hazard Statement

Contains gas under pressure; may explode if heated Contains gas under pressure; may explode if heated Contains gas under pressure; may explode if heated



Precautionary Statements			
Prevention Response Storage Disposal			
		Protect from sunlight and store in well- ventilated place .	

GASES UNDER PRESSURE

(Chapter 2.5)

Sy	/mbol	
Gas	cylinder	

Hazard Category Refrigerated liquefied gas

Signal Word Warning

Hazard Statement

Contains refrigerated gas; may cause cryogenic burns or injury



Precautionary Statements				
Prevention	Response	Storage	Disposal	
Wear cold insulating gloves/face shield/eye protection when operating pressure equipment.	IF ON SKIN OR CLOTHES: Rinse immediately contaminated clothes and skin with plenty of water before removing clothes. Thaw frosted parts with likewarm water. Do not rub affected area. Seek immediate medical attention/advice.	Protect from sunlight and store in well-ventilated place .		

FLAMMABLE LIQUIDS (Chapter 2.6)





Hazard Category

2

3

Signal Word Danger Danger Warning

Hazard Statement

Extremely flammable liquid and vapour Highly flammable liquid and vapour Flammable liquid and vapour

Precautionary Statements			
Prevention	Response	Storage	Disposal
Keep container tightly closed. Keep away from ignition sources such as heat/sparks/open flame. - No smoking.	In case of fire, use for extinction appropriate media specified by the manufacturer or the compentent authority if water increases risk.	Store in cool/well-ventilated place.	Dispose of this material and its container to (in accordance with local/regional/national/international regulation).
Wear protective gloves and eye/face protection. as specified by the manufacturer or the compentent authority.			
Ground/Bond container and receiving equipment if electrostatically sensitive material is for reloading.			
- if product is as volatile as to generate hazardous atmosphere:			
* Use explosion-proof electrical/ventilating/ lighting/ equipment other specified by the manufacturer or the compentent authority.			
* Take precautionary measures against static discharge.			
* Use only non-sparking tools.			

if likely to be used commercially.

FLAMMABLE LIQUIDS (Chapter 2.6)

Symbol	
None	

Hazard Category 4

Signal Word Warning

Hazard Statement Combustible liquid

Precautionary Statements			
Prevention	Response	Storage	Disposal
Wear protective gloves and eye/face protection. as specified by the manufacturer or the compentent authority. Keep away from flames and hot surfaces.	In case of fire, use for extinction appropriate media specified by the manufacturer or the compentent authority if water increases risk		Dispose of this material and its container to (in accordance with local/regional/national/international regulation).

FLAMMABLE SOLIDS

(Chapter 2.7)

Symbol Flame



Hazard Category
1

2

Signal Word Danger

Danger

Hazard StatementFlammable solid
Flammable solid

Precautionary Statements			
Prevention	Response	Storage	Disposal
Wear protective gloves and eye/face protection. as specified by the manufacturer or the compentent authority. Keep away from ignition sources such as heat/sparks/open flame No smoking. * Use explosion-proof electrical/ventilating/lighting/ equipment other specified by the manufacturer or the compentent authority if dust clouds can occur. Ground/Bond container and receiving equipment if electrostatically sensitive material is for reloading.	In case of fire, use for extinction appropriate media specified by the manufacturer or the compentent authority if water increases risk		

^{*} if likely to be used commercially.

SELF-REACTIVE SUBSTANCES

(Chapter 2.8)

Symbol Exploding Bomb



Hazard Category Type A

Signal Word Danger

Hazard Statement

Heating may cause an explosion

Precautionary Statements			
Prevention	Response	Storage	Disposal
Wear protective gloves and eye/face protection. as specified by the manufacturer or the compentent authority.	In case of fire: Evacuate area and fight fire remotely due to the risk of explosion.	Store in cool/well-ventilated place. Store at temperatures not exceeding °C/ °F.	Dispose of this material and its container to (in accordance with local/regional/national/international regulation).
Keep away from ignition sources such as heat/sparks/open flame No smoking.	In case of fire, use for extinction appropriate media specified by the manufacturer or the compentent authority if water increases risk.	specified by the manufacturer or the compentent authority Store away from other materials.	, , , , , , , , , , , , , , , , , , ,
Keep away from incompatible materials specified by the manufacturer or the compentent authority.		•	
* Keep only in original container.			

if likely to be used commercially or by the general public.

SELF-REACTIVE SUBSTANCES

(Chapter 2.8)

Symbol Exploding Bomb & Flame

Hazard Category Type B

Signal Word Danger

Hazard Statement

Heating may cause a fire or explosion





Precautionary Statements			
Prevention	Response	Storage	Disposal
Wear protective gloves and eye/face protection. as specified by the manufacturer or the compentent authority. Keep away from ignition sources such as heat/sparks/open flame No smoking. Keep away from incompatible materials specified by the manufacturer or the compentent authority. * Keep only in original container.	In case of fire: Evacuate area and fight fire remotely due to the risk of explosion. In case of fire, use for extinction appropriate media specified by the manufacturer or the compentent authority if water increases risk	Store in cool/well-ventilated place. Store at temperatures not exceeding °C/ °F specified by the manufacturer or the compentent authority. Store away from other materials.	Dispose of this material and its container to (in accordance with local/regional/national/international regulation).

if likely to be used commercially or by the general public.

SELF-REACTIVE SUBSTANCES

(Chapter 2.8)

Symbol Flame



Signal Word **Hazard Statement**

Hazard Category Type C Danger Heating may cause a fire Type D Danger Heating may cause a fire Type E Warning Heating may cause a fire Type F Heating may cause a fire Warning

Precautionary Statements				
Prevention	Response	Storage	Disposal	
Wear protective gloves and eye/face protection. as specified by the manufacturer or the compentent authority. Keep away from ignition sources such as heat/sparks/open flame No smoking. Keep away from incompatible materials specified by the manufacturer or the compentent authority. * Keep only in original container.	In case of fire, use for extinction appropriate media specified by the manufacturer or the compentent authority if water increases risk.	Store in cool/well-ventilated place. Store at temperatures not exceeding °C/ °F specified by the manufacturer or the compentent authority. Store away from other materials.	Dispose of this material and its container to (in accordance with local/regional/national/international regulation).	

if likely to be used commercially.

PYROPHORIC LIQUIDS (Chapter 2.9)

Symbol Flame

Hazard Category 1

Signal Word Danger

Hazard Statement

Catches fire spontaneously if exposed to air

Precautionary Statements			
Prevention	Response	Storage	Disposal
Do not allow contact with air.	In case of fire, use for extinction appropriate media specified by the	Store contents under appropriate liquid or inert gas specified by	
Wear protective gloves and eye/face protection. as specified by the manufacturer or the	manufacturer or the compentent authority if water increases risk	the manufacturer or the compentent authority.	
compentent authority.	If on skin immerse in cool water/wrap with wet bandages.		
Keep away from ignition sources <i>such as</i> heat/sparks/open flame. - No smoking.			

PYROPHORIC SOLIDS

(Chapter 2.10)

Symbol Flame

Hazard Category 1

Signal Word Danger

Hazard Statement

Catches fire spontaneously if exposed to air



Precautionary Statements			
Prevention	Response	Storage	Disposal
Do not allow contact with air.	In case of fire, use for extinction appropriate media specified by the	Store contents under appropriate liquid or inert gas specified by	
Wear protective gloves and eye/face protection.	manufacturer or the compentent authority if water increases risk	the manufacturer or the compentent authority.	
as specified by the manufacturer or the compentent authority.	Brush off loose particles from skin and immerse in cool water/wrap in wet		
Keep away from ignition sources such as heat/sparks/open flame No smoking.	bandages.		

SELF-HEATING SUBSTANCES

(Chapter 2.11)

Hazard Statement





Hazard Category Signal Word

1 2 Danger S Warning S

Self-heating; may catch fire Self-heating in large quantities; may catch fire

Precautionary Statements			
Prevention	Response	Storage	Disposal
Keep cool and protect from sunlight. Wear protective gloves and eye/face protection. as specified by the manufacturer or the compentent authority.		* Store away from other materials. Store bulk masses greater than kg/lbs at temperatures not exceeding°C/°F specified by the manufacturer or the compentent authority. Maintain air gap between stacks/pallets.	

^{*} if likely to be used commercially or by the general public.

SUBSTANCES WHICH, IN CONTACT WITH WATER, EMIT FLAMMABLE GASES (Chapter 2.12)

Symbol Flame

Signal Word **Hazard Category** 1

2

Danger Danger **Hazard Statement**

In contact with water releases flammable gases, which may ignite spontaneously

In contact with water releases flammable gas



Precautionary Statements				
Prevention	Response	Storage	Disposal	
Keep from any possible contact with water, because of violent reaction and possible flash fire.	In case of fire, use for extinction appropriate media specified by the manufacturer or the compentent authority if water increases risk	Store in a dry place and/or in closed container.	Dispose of this material and its container to (in accordance with local/regional/national/international regulation).	
Handle under inert gas, protect from moisture.	Brush off loose particles from skin and immerse in cool water/wrap in wet		,	
Wear protective gloves and eye/face protection. as specified by the manufacturer or the compentent authority.	bandages			

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SUBSTANCES WHICH, IN CONTACT WITH WATER, EMIT FLAMMABLE GASES (Chapter 2.12)

Symbol Flame



Hazard Category 3

Signal Word Warning

Hazard Statement

In contact with water releases flammable gas

Precautionary Statements				
Prevention	Response	Storage	Disposal	
Handle under inert gas, protect from moisture.	In case of fire, use for extinction appropriate media specified by the manufacturer or the compentent authority.	Store in a dry place and/or in closed container.	Dispose of this material and its container to (in accordance with local/regional/national/	
Wear protective gloves and eye/face protection. as specified by the manufacturer or the compentent authority.	- if water increases risk		international regulation).	

OXIDIZING LIQUIDS (Chapter 2.13)

Symbol Flame over circle

Hazard Category 1

Signal Word Danger

Hazard Statement

May cause fire or explosion; strong oxidizer

Precautionary Statements				
Prevention	Response	Storage	Disposal	
Keep away from heat.	In case of major fire and large quantities: Evacuate area and fight fire remotely due	Store away from combustibles/ other incompatible materials specified by the	Dispose of this material and its container to	
Keep away from clothing and other combustible materials.	to the risk of explosion.	manufacturer or the compentent authority.	(in accordance with local/regional/national/international regulation).	
Wear fire/flame resistant/retardant clothing.	In case of fire, use for extinction appropriate media specified by the manufacturer or the compentent authority if water increases risk			
Wear protective gloves and eye/face protection.	IF ON CLOTHING: Rinse immediately			
as specified by the manufacturer or the compentent authority.	contaminated clothing and skin with plenty of water before removing clothes.			
Do not unintentionally mix with combustibles/ other incompatible materials specified by the manufacturer or the compentent authority.				

OXIDIZING LIQUIDS (Chapter 2.13)

Symbol Flame over circle



Hazard Category 2 3

Signal Word Danger Warning

Hazard Statement

May intensify fire; oxidizer May intensify fire; oxidizer

Precautionary Statements				
Prevention	Response	Storage	Disposal	
Keep away from heat. Wear protective gloves and eye/face protection. as specified by the manufacturer or the compentent authority. Do not unintentionally mix with combustibles/	In case of fire, use for extinction appropriate media specified by the manufacturer or the compentent authority if water increases risk	Store away from combustibles/ other incompatible materials specified by the manufacturer or the compentent authority.	Dispose of this material and its container to (in accordance with local/regional/national/international regulation).	

OXIDIZING SOLIDS

(Chapter 2.14)

Symbol Flame over circle

Hazard Category 1

Signal Word Danger

Hazard Statement

May cause fire or explosion; strong oxidizer

Precautionary Statements				
Prevention	Response	Storage	Disposal	
Keep away from heat.	In case of major fire and large quantities: Evacuate area and fight fire remotely due	Store away from combustibles/ other incompatible materials specified by the	Dispose of this material and its container to	
Keep away from clothing and other combustible materials.	to the risk of explosion.	manufacturer or the compentent authority.	(in accordance with local/regional/national/ international regulation).	
Wear fire/flame resistant/retardant clothing.	In case of fire, use for extinction appropriate media specified by the manufacturer or the compentent authority if water increases risk			
Wear protective gloves and eye/face protection.	IF ON CLOTHING: Rinse immediately			
as specified by the manufacturer or the compentent authority.	contaminated clothing and skin with plenty of water before removing clothes.			
Do not unintentionally mix with combustibles/ other incompatible materials specified by the manufacturer or the compentent authority.				

OXIDIZING SOLIDS

(Chapter 2.14)

Symbol Flame over circle



Hazard Category

3

Signal Word Danger Warning **Hazard Statement**

May intensify fire; oxidizer May intensify fire; oxidizer May intensify fire; oxidizer

Precautionary Statements			
Prevention	Response	Storage	Disposal
Keep away from heat. Wear protective gloves and eye/face protection. as specified by the manufacturer or the compentent authority.	In case of fire, use for extinction appropriate media specified by the manufacturer or the compentent authority if water increases risk.	Store away from combustibles/ other incompatible materials specified by the manufacturer or the compentent authority.	Dispose of this material and its container to (in accordance with local/regional/national/international regulation).
Do not unintentionally mix with combustibles/ other incompatible materials specified by the manufacturer or the compentent authority.			

ORGANIC PEROXIDES

(Chapter 2.15)

Symbol Exploding Bomb



Hazard Category Type A

Signal Word Danger

Hazard Statement

Heating may cause an explosion

Precautionary Statements			
Prevention	Response	Storage	Disposal
Keep away from ignition sources such as heat/sparks/open flame No smoking.		Store away from other materials.	Dispose of this material and its container to
Keep away from incompatible materials specified by the manufacturer or the compentent authority.		Store in cool place at temperatures not exceeding °C/ °F specified by the manufacturer or the compentent authority.	(in accordance with local/regional/national/international regulation).
Wear protective gloves and eye/face protection. as specified by the manufacturer or the compentent authority.		Protect from sunlight.	
* Keep only in original container.			

if likely to be used commercially or by the general public.

ORGANIC PEROXIDES

(Chapter 2.15)

SymbolExploding Bomb &
Flame over circle





Hazard Category Type B

Signal Word Danger

Hazard Statement

Heating may cause a fire or explosion

Precautionary Statements			
Prevention	Response	Storage	Disposal
Keep away from ignition sources such as heat/sparks/open flame No smoking.		Store away from other materials.	Dispose of this material and its container to
Keep away from incompatible materials specified by the manufacturer or the compentent authority.		Store in cool place at temperatures not exceeding°C/°F specified by the manufacturer or the compentent authority.	(in accordance with local/regional/national/international regulation).
* Keep only in original container.		Protect from sunlight.	
Wear protective gloves and eye/face protection. as specified by the manufacturer or the compentent authority.			

^{*} if likely to be used commercially or by the general public.

ORGANIC PEROXIDES

(Chapter 2.15)

Symbol Flame over circle



Signal Word **Hazard Statement**

Hazard Category Type C Danger Heating may cause a fire Type D Danger Heating may cause a fire Type E Warning Heating may cause a fire Type F Warning Heating may cause a fire

Precautionary Statements			
Prevention	Response	Storage	Disposal
Keep away from ignition sources such as heat/sparks/open flame No smoking. Keep away from incompatible materials specified by the manufacturer or the compentent authority. * Keep only in original container. Wear protective gloves and eye/face protection. as specified by the manufacturer or the compentent authority.		Store away from other materials. Store in cool place at temperatures not exceeding°C/°F specified by the manufacturer or the compentent authority. Protect from sunlight.	Dispose of this material and its container to (in accordance with local/regional/national/international regulation).

if likely to be used commercially or by the general public.

CORROSIVE TO METALS

(Chapter 2.16)

Symbol Corrosion

Hazard Category

Signal Word Warning

Hazard Statement

May be corrosive to metals

Precautionary Statements				
Prevention Response Storage Disposal				
* Keep only in original container.	Absorb spillage to prevent material damage.	Store in corrosive resistant/ container with a resistant inliner other compatible materials specified by the manufacturer or the compentent authority.		

if likely to be used commercially or by the general public.

ACUTE TOXICITY - ORAL

(Chapter 3.1)

Symbol Skull and crossbones

Hazard Category

2

Signal Word Danger Danger

Hazard Statement Fatal if swallowed Fatal if swallowed



Precautionary Statements				
Prevention	Response	Storage	Disposal	
Do not eat, drink or use tobacco when using this product. Wash hands thoroughly after handling.	IF SWALLOWED: Immediately call a POISON CONTROL CENTER or doctor/physician. Rinse mouth Give a slurry of activated charcoal if advised. - if ingestion of a solid water soluble substance Specific treatment (see on this label) reference to Supplemental First Aid Instruction. - if immediate administration of antidote is required.	* Store locked up.	Dispose of this material and its container to (in accordance with local/regional/national/international regulation).	
* if likely to be used commercially or by t	ha annanal muhiin			

if likely to be used commercially or by the general public.

ACUTE TOXICITY - ORAL

(Chapter 3.1)

Symbol Skull and crossbones

Hazard Category 3

Signal Word Danger **Hazard Statement** Toxic if swallowed



Precautionary Statements				
Prevention	Response	Storage	Disposal	
Do not eat, drink or use tobacco when using this product. Wash hands thoroughly after handling.	IF SWALLOWED: Immediately call a POISON CONTROL CENTER or doctor/physician. Rinse mouth. Specific treatment (see on this label) reference to Supplemental First Aid Instruction. -if specific measures are required.	* Store locked up.	Dispose of this material and its container to (in accordance with local/regional/national/international regulation).	

^{*} if likely to be used commercially or by the general public.

ACUTE TOXICITY – ORAL

(Chapter 3.1)

Symbol Exclamation mark



Hazard Category 4

Signal Word Warning

Hazard Statement Harmful if swallowed

Precautionary Statements				
Prevention	Response	Storage	Disposal	
Do not eat, drink or use tobacco when using this product. Wash hands thoroughly after handling.	IF SWALLOWED: Call a POISON CONTROL CENTER or doctor/physician if you feel unwell. Rinse mouth.		Dispose of this material and its container to (in accordance with local/regional/national/international regulation).	

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ACUTE TOXICITY - ORAL

(Chapter 3.1)

Symbol	
None	

Hazard Category 5

Signal Word Warning **Hazard Statement**

May be harmful if swallowed

Precautionary Statements				
Prevention Response Storage Disposal				
	Call a POISON CONTROL CENTER/doctor/physician if you feel unwell.			

ACUTE TOXICITY – DERMAL

(Chapter 3.1)

Symbol Skull and crossbones



Signal Word Danger **Hazard Category**

1 2

Danger

Hazard Statement Fatal in contact with skin Fatal in contact with skin

Precautionary Statements				
Prevention	Response	Storage	Disposal	
Do not eat, drink or use tobacco when using this product. Wash hands thoroughly after handling. Do not get in eyes, on skin, or on clothing. Wear protective gloves/clothing. as specified by the manufacturer or the compentent authority.	Remove/Take off immediately all contaminated clothing. IF ON SKIN: Gently wash with plenty of soap and water. Immediately call a POISON CONTROL CENTRE or doctor/physician. Specific measures (see on this label) reference to Supplemental First Aid Instruction. - if immediate measures such as specific cleansing agent is advised. Wash/Decontaminate removed clothing before reuse.	* Store locked up.	Dispose of this material and its container to (in accordance with local/regional/national/international regulation).	

if likely to be used commercially or by the general public.

ACUTE TOXICITY - DERMAL

(Chapter 3.1)

Symbol Skull and crossbones



Hazard Category 3

Signal Word Danger **Hazard Statement**Toxic in contact with skin

Precautionary Statements				
Prevention	Response	Storage	Disposal	
Wear protective gloves/clothing. as specified by the manufacturer or the compentent authority.	Remove/Take off immediately all contaminated clothing. IF ON SKIN: Wash with plenty of soap and water. Call a POISON CONTROL CENTRE or doctor/physician if you feel unwell. Specific measures (see on this label) reference to Supplemental First Aid Instruction. - if measures such as specific cleansing agent is advised. Wash/Decontaminate removed clothing before reuse.	* Store locked up.	Dispose of this material and its container to (in accordance with local/regional/national/international regulation).	

^{*} if likely to be used commercially or by the general public.

ACUTE TOXICITY – DERMAL

(Chapter 3.1)

Symbol Exclamation mark

Hazard Category

Signal Word Warning

Hazard Statement

Harmful in contact with skin



Precautionary Statements				
Prevention	Response	Storage	Disposal	
Wear protective gloves/clothing. as specified by the manufacturer or the compentent authority.	IF ON SKIN: Wash with plenty of soap and water. Call a POISON CONTROL CENTER or doctor/physician if you feel unwell. Specific measures (see on this label) reference to Supplemental First Aid Instruction. - if measures such as specific cleansing agent is advised. Wash contaminated clothing before reuse.		Dispose of this material and its container to (in accordance with local/regional/national/international regulation).	

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ACUTE TOXICITY – DERMAL

(Chapter 3.1)

Symbol	
None	

Hazard Category 5

Signal Word Warning **Hazard Statement**

May be harmful in contact with skin

Precautionary Statements				
Prevention Response Storage Disposal				
	Call a POISON CONTROL CENTER or doctor/ physician if you feel unwell.			

ACUTE TOXICITY – INHALATION (Chapter 3.1)

Symbol Skull and crossbones

Hazard Category

Signal Word

Hazard Statement

2

Danger Danger Fatal if inhaled Fatal if inhaled



Precautionary Statements				
Prevention	Response	Storage	Disposal	
Do not breathe dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Wear respiratory protection. as specified by the manufacturer or the compentent authority.	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Immediately call a POISON CONTROL CENTER or doctor/physician. Specific treatment is urgent (see on this label) reference to Supplemental First Aid Instruction if immediate administration of antidote is required.	* Store locked up. Store container tightly closed in wellventilated place. - if product is as volatile as to generate hazardous atmosphere.		

if likely to be used commercially or by the general public.

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ACUTE TOXICITY – INHALATION (Chapter 3.1)

Symbol Skull and crossbones Skull

Hazard Category 3

Signal Word Danger **Hazard Statement**Toxic if inhaled



Precautionary Statements				
Prevention	Response	Storage	Disposal	
Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/ gas/mist/vapours/spray.	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CONTROL CENTER or doctor/physician. Specific treatment (see on this label) reference to Supplemental First Aid Instruction - if immediate specific measures are required.	* Store locked up. Store container tightly closed in wellventilated place if product is as volatile as to generate hazardous atmosphere.		

^{*} if likely to be used commercially or by the general public.

ACUTE TOXICITY – INHALATION

(Chapter 3.1)

Symbol Exclamation mark

Hazard Category

Signal Word Warning

Hazard Statement Harmful if inhaled



Precautionary Statements			
Prevention	Response	Storage	Disposal
Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/ gas/mist/vapours/spray.	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CONTROL CENTER or doctor/physician if you feel unwell		

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ACUTE TOXICITY – INHALATION

(Chapter 3.1)

Symbol	
None	

Hazard Category5 **Signal Word**Warning

Hazard StatementMay be harmful if inhaled

Precautionary Statements			
Prevention	Response	Storage	Disposal
	IF INHALED: Call a POISON CONTROL CENTER or doctor/physician if you feel unwell		

SKIN CORROSION/IRRITATION (Chapter 3.2)

Symbol Corrosion

Hazard Category 1A to 1C

Signal Word Danger

Hazard Statement

Causes severe skin burns and eye damage



Precautionary Statements				
Prevention	Response	Storage	Disposal	
Wear protective gloves/clothing and eye/face protection. as specified by the manufacturer or the compentent authority. Wash thoroughly after handling.	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing under the shower and wash skin with plenty of soap and water. Wash contaminated clothing before reuse.	* Store locked up.	Dispose of this material and its container to (in accordance with local/regional/national/international regulation).	
Do not breathe dust or mist if inhalable particles may occur during use.	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.			
	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.			
	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.			
	Immediately call a POISON CONTROL CENTER or doctor/physician.			
	Specific treatment (see on this label) reference to Supplemental First Aid Instruction. may include a cleansing agent specified by the manufacturer or the compentant authority.			

if likely to be used commercially or by the general public.

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SKIN CORROSION/IRRITATION (Chapter 3.2)

Symbol Exclamation mark

Hazard Category

Signal Word Warning

Hazard Statement Causes skin irritation



Precautionary Statements			
Prevention	Response	Storage	Disposal
Wear protective gloves. as specified by the manufacturer or the compentent authority. Wash thoroughly after handling.	IF ON SKIN: Wash with plenty of soap and water. Take of contaminated clothing and wash before re-use. If skin irritation occurs, seek medical advice/attention. Specific treatment (see on this label) reference to Supplemental First Aid Instruction. may include a cleansing agent specified by the manufacturer or the compentent authority.		

SKIN CORROSION/IRRITATION (Chapter 3.2)

Symbol	
None	

Signal Word Warning **Hazard Category Hazard Statement** Causes mild skin irritation

Precautionary Statements			
Prevention Response Storage Disposal			
	If skin irritation occurs, get medical advice/attention.		

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EYE DAMAGE/IRRITATION (Chapter 3.3)

Symbol Corrosion



Signal Word Danger

Hazard Statement

Causes serious eye damage

Precautionary Statements			
Prevention	Response	Storage	Disposal
Wear eye/face protection. as specified by the manufacturer or the compentent authority.	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CONTROL CENTER or doctor/physician.		

EYE DAMAGE/IRRITATION (Chapter 3.3)

Symbol	
xclamation mark	

Hazard Category 2A

Signal Word Warning

Hazard Statement Causes serious eye irritation



Precautionary Statements			
Prevention	Response	Storage	Disposal
Wear eye/face protection. as specified by the manufacturer or the compentent authority.	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.		

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EYE DAMAGE/IRRITATION (Chapter 3.3)

Symbol
None

Signal Word Warning **Hazard Category Hazard Statement** 2B Causes eye irritation

Precautionary Statements			
Prevention	Response	Storage	Disposal
	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.		

SENSITIZATION - RESPIRATORY

(Chapter 3.4)

Symbol Health Hazard

Hazard Category 1

Signal Word Danger

Hazard Statement

May cause allergy or asthma symptoms or breathing difficulties if inhaled



Precautionary Statements			
Prevention	Response	Storage	Disposal
Avoid breathing dust/fume/gas/mist/vapours/spray. In case of inadequate ventilation wear respiratory protection. as specified by the manufacturer or the compentent authority.	IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptions call a POISON CONTROL CENTER or doctor/physician.		Dispose of this material and its container to (in accordance with local/regional/national/international regulation).

SENSITIZATION - SKIN

(Chapter 3.4)

Symbol Exclamation mark

•

Hazard Category

Signal Word Warning

Hazard Statement

May cause an allergic skin reaction

Precautionary Statements			
Prevention	Response	Storage	Disposal
Wear protective gloves. as specified by the manufacturer or the compentent authority. Avoid breathing dust/fume/gas/mist/vapours/spray. * Contaminated work clothing should not be allowed out of the workplace.	IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs, seek medical advice/attention. Specific treatment (see on this label) reference to Supplemental First Aid Instruction. may include a cleansing agent specified by the manufacturer or the compentent authority. Wash contaminated clothing before reuse.		

^{*} if likely to be used commercially.

GERM CELL MUTAGENICITY

(Chapter 3.5)

Symbol Health Hazard

Hazard Category 1

2

Signal Word

Hazard Statement Danger May cause genetic defects <...> Warning

Suspected of causing genetic defects < >

(state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard.)

Precautionary Statements			
Prevention	Response	Storage	Disposal
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use Personal Protective Equipment as required.	IF exposed or concerned: Get medical attention/advice.	* Store locked up.	Dispose of this material and its container to (in accordance with local/regional/national/international regulation).

if likely to be used commercially or by the general public.

CARCINOGENICITY

(Chapter 3.6)

Symbol Health Hazard



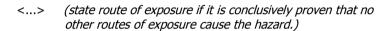


2

Signal Word Danger Warning

Hazard Statement

May cause cancer <...> Suspected of causing cancer < >



Precautionary Statements			
Prevention	Response	Storage	Disposal
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use Personal Protective Equipment as required.	IF exposed or concerned: Get medical attention/advice.	* Store locked up.	Dispose of this material and its container to (in accordance with local/regional/national/international regulation).

if likely to be used commercially or by the general public.

TOXIC TO REPRODUCTION

(Chapter 3.7)

Symbol Health Hazard

Hazard Category 1

2

Signal Word Danger

Warning

Hazard Statement

May damage fertility or the unborn child <...> <<...>> Suspected of damaging fertility or the unborn child <...> <<...>>

(state specific effect if known)

<<...>> (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)



Precautionary Statements			
Prevention	Response	Storage	Disposal
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use Personal Protective Equipment as required.	IF exposed or concerned: Get medical attention/advice.	* Store locked up.	Dispose of this material and its container to (in accordance with local/regional/national/international regulation).

if likely to be used commercially or by the general public.

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TOXIC TO REPRODUCTION

(Chapter 3.7)
(EFFECTS ON OR VIA LACTATION)

Symbol	
None	

Hazard Category (additional)

Signal Word No signal word

Hazard Statement

May cause harm to breast-fed children

Precautionary Statements			
Prevention	Response	Storage	Disposal
Obtain special instructions before use. Avoid contact during pregnancy/while nursing.	IF exposed or concerned: Get medical attention/advice.		
Do not eat, drink or smoke when using this product.			
Wash hands thoroughly after handling.			
Do not breathe dust or mist if inhalable particles may occur during use			

TARGET ORGAN SYSTEMIC TOXICITY (Single Exposure)

(Chapter 3.8)

Symbol Health Hazard

Hazard Category

Signal Word Danger

Hazard Statement

Causes damage to <...> if <<...>.

<...> (state all organs affected, or use a general statement where there is no definite evidence that other organs are not effected.)

<<...>> (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard.)



Precautionary Statements				
Prevention	Response	Storage	Disposal	
Do not eat, drink or use tobacco when using this product.	IF exposed: Call a POISON CONTROL CENTER or doctor/physician.	* Store locked up.	Dispose of this material and its container to (in accordance with local/regional/national/	
Wash hands thoroughly after handling. Do not breathe dust or mist. - if inhalable particles may occur during use.	Specific treatment (see on this label) reference to Supplemental First Aid Instruction if immediate measures are required.		international regulation).	

if likely to be used commercially or by the general public.

TARGET ORGAN SYSTEMIC TOXICITY (Single Exposure)

(Chapter 3.8)

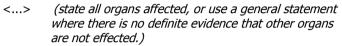
Symbol Health Hazard

Hazard Category

Signal Word Warning

Hazard Statement

May cause damage to <...> if <<...>.



<<...>> (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard.)



Precautionary Statements			
Prevention	Response	Storage	Disposal
Do not eat, drink or use tobacco when using this product. Wash hands thoroughly after handling. Do not breathe dust or mist. - if inhalable particles may occur during use.	Call a POISON CONTROL CENTER or doctor/physician if exposed or you feel unwell.		Dispose of this material and its container to (in accordance with local/regional/national/international regulation).

TARGET ORGAN SYSTEMIC TOXICITY (Single Exposure) (Chapter 3.8)

Symbol Exclamation Mark

Hazard Category 3

Signal Word Warning

Hazard Statement

May cause respiratory irritation or May cause drowsiness and dizziness



Precautionary Statements			
Prevention	Response	Storage	Disposal
Use only outdoors or in well-ventilated area. Avoid breathing dust/fume/ gas/mist/vapours/spray.	Call a POISON CONTROL CENTER or doctor/physician if you feel unwell. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.	* Store locked up. Store container tightly closed in wellventilated place. - if product is as volatile as to generate hazardous atmosphere.	Dispose of this material and its container to (in accordance with local/regional/national/international regulation).

if likely to be used commercially or by the general public.

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TARGET ORGAN SYSTEMIC TOXICITY (Repeated Exposure)

(Chapter 3.9)

Symbol Health Hazard

Hazard Category

Signal Word Danger

Hazard Statement

Causes <...> damage through prolonged or repeated exposure <<...>>.



- <...> (state all organs affected, or use a general statement where there is no definite evidence that other organs are not effected.)
- <<...>> (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard.)

Precautionary Statements			
Prevention	Response	Storage	Disposal
Do not eat, drink or use tobacco when using this product.	Get medical attention/advice if you feel unwell.		Dispose of this material and its container to
Wash hands thoroughly after handling.			(in accordance with local/regional/national/international regulation).
Do not breathe dust or mist if inhalable particles may occur during use.			

TARGET ORGAN SYSTEMIC TOXICITY (Repeated Exposure)

(Chapter 3.9)

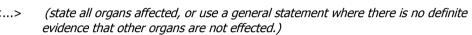
Symbol Health Hazard

Hazard Category

Signal Word Warning

Hazard Statement

May cause <...> damage through prolonged or repeated exposure <<...>>.



<<...>> (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard.)



Precautionary Statements			
Prevention	Response	Storage	Disposal
Do not breathe dust or mist if inhalable particles may occur during use.	Get medical attention/advice if you feel unwell.		Dispose of this material and its container to (in accordance with local/regional/national/international regulation).

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AQUATIC ENVIRONMENT - ACUTE HAZARD (Chapter 3.10)

Symbol Environment



Hazard Category

Signal Word Warning

Hazard Statement Very toxic to aquatic life

Precautionary Statements			
Prevention	Response	Storage	Disposal
Avoid release to the environment if this is not the intended use.	Collect spillage.		Dispose of this material and its container to (in accordance with local/regional/national/international regulation).

AQUATIC ENVIRONMENT - ACUTE HAZARD (Chapter 3.10)

Symbol	
None	

Hazard Category 2 Signal Word No signal word **Hazard Statement** Toxic to aquatic life 3 No signal word Harmful to aquatic life

Precautionary Statements			
Prevention	Response	Storage	Disposal
Avoid release to the environment if this is not the intended use.			Dispose of this material and its container to (in accordance with local/regional/national/international regulation).

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AQUATIC ENVIRONMENT - CHRONIC HAZARD (Chapter 3.10)

Symbol Environment

Hazard Category

1 2

Signal Word Warning

No signal word

Hazard Statement

Very toxic to aquatic life with long lasting effects
Toxic to aquatic life with long lasting effects



Precautionary Statements			
Prevention	Response	Storage	Disposal
Avoid release to the environment if this is not the intended use.	Collect spillage.		Dispose of this material and its container to (in accordance with local/regional/national/international regulation).

AQUATIC ENVIRONMENT - CHRONIC HAZARD (Chapter 3.10)

Symbol	
None	

Hazard Category 3

4

Signal Word No signal word No signal word

Hazard Statement

Harmful to aquatic life with long lasting effects May cause long lasting harmful effects to aquatic life.

Precautionary Statements			
Prevention	Response	Storage	Disposal
Avoid release to the environment if this is not the intended use.			Dispose of this material and its container to (in accordance with local/regional/national/international regulation).

ASPIRATION TOXICITY

(Chapter 3.11)

Symbol Health Hazard



Hazard CategorySignal WordHazard Statement1DangerMay be fatal if swallow

Warning

May be fatal if swallowed and enters airways May be harmful if swallowed and enters airways

Precautionary Statements			
Prevention	Response	Storage	Disposal
	IF SWALLOWED: Immediately call a POISON CONTROL CENTER or doctor/physician. Do NOT induce vomiting.	* Store locked up.	Dispose of this material and its container to (in accordance with local/regional/national/international regulation).

^{*} if likely to be used commercially or by the general public.

2