ANNEX 3

PRECAUTIONARY STATEMENTS AND PRECAUTIONARY PICTOGRAMS

Annex 3

PRECAUTIONARY STATEMENTS AND PRECAUTIONARY PICTOGRAMS

A3.1 Introduction

- A3.1.1 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/supplier and/or competent authority (see Chapter 1.2 and Chapter 1.4, sub-section 1.4.6.3).
- A3.1.2 A **Precautionary statement** is a phrase (and/or pictogram) which 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)).
- A3.1.3 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 Emergency Response Guidebook (ERG 2004), and U.S. Environmental Protection Agency Pesticide Label Review Manual.
- A3.1.4 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.
- A3.1.5 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.
- A.3.1.6 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.
- A.3.1.7 This 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

- A3.2.1 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 which 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 other languages.
- A3.2.2 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 (see 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 5). If certain hazard statements are not required then the corresponding precautionary statements are also not necessary (see A5.1.1).

A3.2.3 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 antidotes 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

- A3.3.1 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.
- A3.3.2 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

- A3.4.1 General precautionary measures should be adopted for all substances and mixtures which are classified as hazardous to human health or the environment. To this end, the needs of and the information sources available to three groups of users or applicators should be taken into account: the general public, the commercial user and the industrial worker.
- A3.4.2 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.
- A3.4.3 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.
- A3.4.4 The following general precautionary statements 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. |
|-------------------|---|---|
| Industrial worker | GHS Label, Supplemental Label Information, Safety Data Sheet, Workplace Instructions | none of the above |

A3.5 Structure of the precautionary statements matrix

- A3.5.1 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.
- A3.5.2 The tables making up the matrix show the **core part of the precautionary statements in bold print.** Derogations from the recommended labelling statements 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*. Anything in italics that starts with "- *if*" is intended to be an explanatory note for the application of the Precautionary Statements and is not intended to appear on the label.
- A3.5.3 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.
- A3.5.4 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 and consideration given to the form and type of the substance or mixture. 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.
- A3.5.5 During the development of the matrix, some assumptions have been made in order to rationalize the application of the relevant precautionary statement.
- A3.5.6 In the majority of cases, the recommended precautionary statements 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.
- A3.5.7 Where a substance or mixture is classified for a number of health hazards, 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 may be required in cases of incidental exposure, even if not associated with immediate symptoms of intoxication.
- A3.5.8 To protect people with different reading abilities, it might be useful to include both precautionary pictograms and precautionary statements in order to convey information in more than one way (see 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. While pictograms can be useful, they can be misinterpreted and are not a substitute for training.

A3.6 Matrix of precautionary statements by hazard Class/Category

EXPLOSIVES (CHAPTER 2.1)

Symbol

Exploding bomb

| Hazard category | Signal word | Hazard Statement |
|--------------------|-------------|-------------------------|
| Unstable Explosive | Danger | Unstable Explosive |

| 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. | DO NOT fight fire when fire reaches explosives. Explosion risk in case of fire. Evacuate area. | Store (in accordance with local/regional/national/international regulation). | Dispose of contents/container to (in accordance with local/regional/national/international regulation). | |

EXPLOSIVES (CHAPTER 2.1)

Symbol

Exploding bomb



Hazard category Signal word Hazard statement

Division 1.1 Danger Explosive; mass explosion hazard

Division 1.2 Danger Explosive; severe projection hazard

Division 1.3 Danger 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 fight fire when fire reaches explosives. | Store (in accordance with | Dispose of contents/container to (in accordance with local/ | |
| Do not subject to rough handling such as grinding/shock/friction | In case of fire, evacuate area. Explosion risk in case of fire. | local/regional/national/international regulation). | regional/national/international regulation). | |
| Wear face protection as specified by the manufacturer/supplier or the competent authority. | - | | | |
| Keep wetted with appropriate material specified by the manufacturer/supplier or the competent authority | | | | |
| - if drying out increases explosion hazard, except as needed for manufacturing or operating processes. | | | | |
| Example: nitrocellulose | | | | |
| Ground/bond container and receiving equipment | | | | |
| - if the explosive is electrostatically sensitive. | | | | |

EXPLOSIVES (CHAPTER 2.1)

Symbol

Exploding bomb

Signal word Hazard category **Hazard statement**

Fire or projection hazard Division 1.4 Warning

| | 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. Wear face protection as specified by the manufacturer/supplier or competent authority. Ground/bond container and receiving equipment - if the explosive is electrostatically sensitive. | EXPLOSIVES (except as noted below) DO NOT fight fire when fire reaches explosives. Explosion risk in case of fire. In case of fire, evacuate area. 1.4S AMMUNITION AND COMPONENTS THEREOF DO NOT fight fire when fire reaches explosives. In case of fire, evacuate area. Fight fire with normal precautions from a reasonable distance. - If explosives are 1.4S AMMUNITION AND COMPONENTS THEREOF. | Store (in accordance with local/regional/national/international regulation). | Dispose of contents/container to (in accordance with local/regional/national/international regulation). | | |

- 313 -

EXPLOSIVES (CHAPTER 2.1)

| Symbol |
|-----------|
| No symbol |

Hazard category Signal word Hazard statement

Division 1.5 Danger May mass explode in fire

| | Precautionary statements | | | | |
|---|---|--|--|--|--|
| Prevention | Response | Storage | Disposal | | |
| Keep away from ignition sources such as heat/sparks/open flame No smoking. | DO NOT fight fire when fire reaches explosives. | Store (in accordance with | Dispose of contents/container to (in accordance with | | |
| Do not subject to <i>rough handling such as</i> grinding/shock/friction . | Explosion risk in case of fire. | local/regional/national/international regulation). | local/regional/national/international regulation). | | |
| grinding/snock/friction. | In case of fire, evacuate area. | | | | |
| Wear face protection as specified by the manufacturer/supplier or competent authority. | | | | | |
| Keep wetted with appropriate material specified by the manufacturer/supplier or the competent authority | | | | | |
| - if drying out increases explosion hazard, except as needed for manufacturing or operating processes. | | | | | |
| Example: nitrocellulose | | | | | |
| Ground/bond container and receiving equipment | | | | | |
| - if the explosive is electrostatically sensitive. | | | | | |

FLAMMABLE GASES (CHAPTER 2.2)

| Symbol | |
|--------|--|
| Flame | |

Hazard category Signal word Hazard statement

Danger Extremely flammable gas



| Precautionary statements | | | | |
|---|--|---------------------------------|----------|--|
| Prevention | Response | Storage | Disposal | |
| Keep away from ignition sources such as heat/sparks/open flames-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 GASES (CHAPTER 2.2)

| Symbol | |
|-----------|--|
| No symbol | |

Hazard categorySignal wordHazard statement2WarningFlammable gas

| Precautionary statements | | | | |
|---|--|---------------------------------|----------|--|
| Prevention | Response | Storage | Disposal | |
| Keep away from ignition sources such as heat/sparks/open flames-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

Danger Extremely flammable aerosol

2 Warning 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. | |
| Keep away from ignition sources such as heat/sparks/open flames-No smoking. | | | |

OXIDIZING GASES (CHAPTER 2.4)

Symbol

Flame over circle

Hazard category

Signal word

Hazard statement

1

Danger

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. | | |

GASES UNDER PRESSURE (CHAPTER 2.5)

SymbolGas cylinder

| Hazard category | Signal word | Hazard statement |
|-----------------|-------------|------------------|
|-----------------|-------------|------------------|

Compressed gas Warning Contains gas under pressure; may explode if heated Liquefied gas Warning Contains gas under pressure; may explode if heated Dissolved gas Warning 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)

| Symbol | |
|--------------|--|
| Gas cylinder | |

Hazard category Signal word Hazard statement

Refrigerated liquefied gas Warning Contains refrigerated gas; may cause cryogenic burns or injury



| Precautionary statements | | | | |
|---|--|---------------------------------|----------|--|
| Prevention | Response | Storage | Disposal | |
| Wear cold insulating gloves/face shield/eye protection. | Thaw frosted parts with lukewarm water. | Store in well-ventilated place. | | |
| | Do not rub affected area. | | | |
| | Seek immediate medical attention/advice. | | | |
| | | | | |

- 320 -

FLAMMABLE LIQUIDS (CHAPTER 2.6)

Symbol Flame

| Hazard category | Signal word | Hazard statement |
|-----------------|-------------|---------------------------------------|
| 1 | Danger | Extremely flammable liquid and vapour |
| 2 | Danger | Highly flammable liquid and vapour |
| 3 | Warning | 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/supplier or the competent authority | Store in cool/well-ventilated place. | Dispose of contents/container to (in accordance with local/regional/national/international regulation). | | |
| Wear protective gloves and eye/face protection as specified by the manufacturer/supplier or the competent authority. | - if water increases risk. IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. | | | | |
| Ground/Bond container and receiving equipment | Rinse skin with water/shower. | | | | |
| - 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/supplier or the competent authority. | | | | | |
| Take precautionary measures against static discharge. | | | | | |
| Use only non-sparking tools. | | | | | |

FLAMMABLE LIQUIDS (CHAPTER 2.6)

| Symbol | |
|-----------|--|
| No symbol | |

Hazard categorySignal wordHazard statement4WarningCombustible liquid

| Precautionary statements | | | |
|---|--|--------------------------------------|---|
| Prevention | Response | Storage | Disposal |
| Wear protective gloves and eye/face protection as specified by the manufacturer/supplier or the competent authority. Keep away from flames and hot surfaces. | In case of fire, use for extinction appropriate media specified by the manufacturer/supplier or the competent authority - if water increases risk. | Store in cool/well-ventilated place. | Dispose of contents/container to (in accordance with local/regional/national/international regulation). |

FLAMMABLE SOLIDS (CHAPTER 2.7)

Symbol Flame

Hazard category Signal word Hazard statement

Danger Flammable solid

Warning Flammable solid



| Precautionary statements | | | | |
|--|--|---------|----------|--|
| Prevention | Response | Storage | Disposal | |
| Wear protective gloves and eye/face protection as specified by the manufacturer/supplier or the competent 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/supplier or the competent authority. - if dust clouds can occur. | In case of fire, use for extinction appropriate media specified by the manufacturer/supplier or the competent authority - if water increases risk. | | | |
| Ground/Bond container and receiving equipment - if electrostatically sensitive material is for reloading. | | | | |

SELF-REACTIVE SUBSTANCES AND MIXTURES (CHAPTER 2.8)

Symbol

Exploding bomb

Hazard category Signal word Hazard statement

Type A Danger Heating may cause an explosion



| Precautionary statements | | | | |
|---|--|--|---|--|
| Prevention | Response | Storage | Disposal | |
| Wear protective gloves and eye/face protection as specified by the manufacturer/supplier or the competent authority. Keep away from ignition sources such as heat/sparks/open flame No smoking. Keep away fromincompatible materials specified by the manufacturer/supplier or the competent authority. | 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/supplier or the competent authority - if water increases risk. | Store in cool/well-ventilated place. Store at temperatures not exceeding°C/°F specified by the manufacturer/supplier or the competent authority Store away from other materials. | Dispose of contents/container to (in accordance with local/regional/national/international regulation). | |
| Keep only in original container. | | | | |

SELF-REACTIVE SUBSTANCES AND MIXTURES (CHAPTER 2.8)

Symbol

Exploding bomb and flame

Hazard category Signal word Hazard statement

Type B Danger 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/supplier or the competent authority. Keep away from ignition sources such as heat/sparks/open flame No smoking. Keep away from incompatible materials specified by the manufacturer/supplier or the competent 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/supplier or the competent authority - if water increases risk. | Store in cool/well-ventilated place. Store at temperatures not exceeding °C/ °F specified by the manufacturer/supplier or the competent authority. Store away from other materials. | Dispose of contents/container to (in accordance with local/regional/national/international regulation). | |

- 325 -

SELF-REACTIVE SUBSTANCES AND MIXTURES (CHAPTER 2.8)

| Symbol | |
|--------|--|
| Flame | |

| Hazard category | Signal word | Hazard statement |
|-----------------|-------------|--------------------------|
| 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 |
| 306 | Wear protective gloves and eye/face protection as specified by the manufacturer/supplier or the competent authority. 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/supplier or the competent authority - if water increases risk. | Store in cool/well-ventilated place. Store at temperatures not exceeding°C/°F specified by the manufacturer/supplier or the competent authority. | Dispose of contents/container to (in accordance with local/regional/national/international regulation). |
| | Keep away from incompatible materials specified by the manufacturer/supplier or the competent authority. Keep only in original container. | | Store away from other materials. | |

PYROPHORIC LIQUIDS (CHAPTER 2.9)

| Symbol | |
|--------|--|
| Flame | |

Hazard category Signal word Hazard statement

Danger Catches fire spontaneously if exposed to air



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

PYROPHORIC SOLIDS (CHAPTER 2.10)

| Symbol | |
|--------|--|
| Flame | |

Hazard category

Signal word

Hazard statement

1

Danger Catches fire spontaneously if exposed to air



| Precautionary statements | | | |
|--|--|--|----------|
| Prevention | Response | Storage | Disposal |
| Do not allow contact with air. Wear protective gloves and eye/face protection as specified by the manufacturer/supplier or the competent authority. 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/supplier or the competent authority if water increases risk Brush off loose particles from skin and immerse in cool water/wrap in wet bandages. | Store contents underappropriate liquid or inert gas specified by the manufacturer/supplier or the competent authority. | |

SELF-HEATING SUBSTANCES AND MIXTURES (CHAPTER 2.11)

| Symbol | |
|--------|--|
| Flame | |

Hazard category Signal word Hazard statement

Danger Self-heating; may catch fire

Warning Self-heating in large quantities; may catch fire



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

SUBSTANCES AND MIXTURES WHICH, IN CONTACT WITH WATER, EMIT FLAMMABLE GASES (CHAPTER 2.12)

| Symbol | |
|--------|--|
| Flame | |

| Hazard category | Signal word | Hazard statement |
|-----------------|-------------|------------------|
| | | |

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

2 Danger 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. Handle under inert gas, protect from moisture. Wear protective gloves and eye/face protection as specified by the manufacturer/supplier or the competent authority. | In case of fire, use for extinction appropriate media specified by the manufacturer/supplier or the competent authority - if water increases risk. Brush off loose particles from skin and immerse in cool water/wrap in wet bandages | Store in a dry place and/or in closed container. | Dispose of contents/container to (in accordance with local/regional/national/international regulation). |

SUBSTANCES AND MIXTURES WHICH, IN CONTACT WITH WATER, EMIT FLAMMABLE GASES (CHAPTER 2.12)

| Symbol | |
|--------|--|
| Flame | |

Hazard category

Signal word

Hazard statement

3

Warning

In contact with water releases flammable gas



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

- 331 -

OXIDIZING LIQUIDS (CHAPTER 2.13)

Symbol

Flame over circle

Hazard category

Signal word Hazard statement

Danger May cause fire or explosion; strong oxidizer



| Precautionary statements | | | |
|---|--|---|---|
| Prevention | Response | Storage | Disposal |
| Keep away from heat. Keep away from clothing and other combustible materials. Wear fire/flame resistant/retardant clothing. Wear protective gloves and eye/face protection as specified by the manufacturer/supplier or the competent authority. Take any precaution to avoid mixing with combustibles/ other incompatible materials specified by the manufacturer/supplier or the competent authority. | In case of major fire and large quantities: 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/supplier or the competent authority - if water increases risk. IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. | Store away from combustibles/ other incompatible materials specified by the manufacturer/supplier or the competent authority. | Dispose of contents/container to (in accordance with local/regional/national/international regulation). |

OXIDIZING LIQUIDS (CHAPTER 2.13)

Symbol

Flame over circle



Hazard category Signal word Hazard statement

Danger May intensify fire; oxidizer
 Warning 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/supplier or the competent authority. | In case of fire, use for extinction appropriate media specified by the manufacturer/supplier or the competent authority - if water increases risk. | Store away from combustibles/ other incompatible materials specified by the manufacturer/supplier or the competent authority. | Dispose of contents/container to (in accordance with local/regional/national/international regulation). |
| Take any precaution to avoid mixing with combustibles/ other incompatible materials specified by the manufacturer/supplier or the competent authority. | | | |

- 333

OXIDIZING SOLIDS (CHAPTER 2.14)

Symbol

Flame over circle

Hazard category

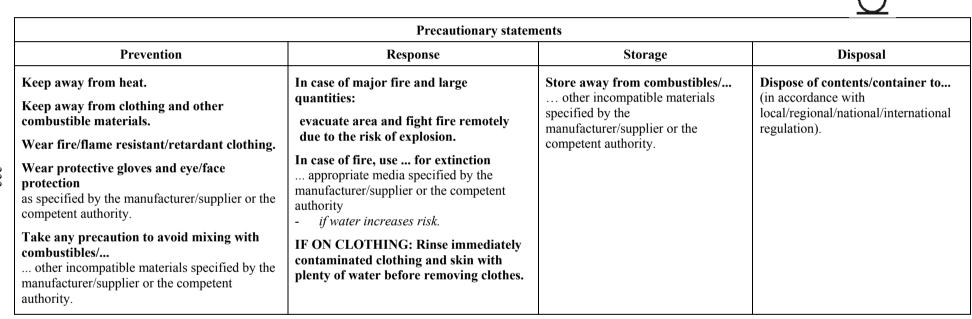
Signal word

Hazard statement

1

Danger

May cause fire or explosion; strong oxidizer



OXIDIZING SOLIDS (CHAPTER 2.14)

Symbol

Flame over circle



Hazard category Signal word Hazard statement

Danger May intensify fire; oxidizer
 Warning 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/supplier or the competent authority. | In case of fire, use for extinction appropriate media specified by the manufacturer/supplier or the competent authority - if water increases risk. | Store away from combustibles/ other incompatible materials specified by the manufacturer/supplier or the competent authority. | Dispose of contents/container to (in accordance with local/regional/national/international regulation). | |
| Take any precaution to avoid mixing with combustibles/ other incompatible materials specified by the manufacturer/supplier or the competent authority. | | | | |

ORGANIC PEROXIDES (CHAPTER 2.15)

Symbol

Exploding bomb

Hazard category

Signal word

Hazard statement

Type A

Danger

Heating may cause an explosion



| 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/supplier or the competent authority. | | Store away from other materials. Store in cool place at temperatures not exceeding°C/°F specified by the manufacturer/supplier or the competent authority. | Dispose of contents/container to (in accordance with local/regional/national/international regulation). |
| Wear protective gloves and eye/face protection as specified by the manufacturer/supplier or the competent authority. | | Protect from sunlight. | |
| Keep only in original container. | | | |

ORGANIC PEROXIDES (CHAPTER 2.15)

Symbol

Exploding bomb and flame

Hazard category Signal word Hazard statement

Type B Danger 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. Keep away from incompatible materials specified by the manufacturer/supplier or the competent authority. | | Store away from other materials. Store in cool place at temperatures not exceeding °C/ °F specified by the manufacturer/supplier or the competent authority. | Dispose of contents/container to (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/supplier or the competent authority. | | | |

ORGANIC PEROXIDES (CHAPTER 2.15)

| Symbol | |
|--------|--|
| Flame | |

| Hazard category | Signal word | Hazard statement |
|-----------------|-------------|--------------------------|
| 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/supplier or the competent authority. | | Store away from other materials. Store in cool place at temperatures not exceeding°C/°F specified by the manufacturer/supplier or the competent authority. | Dispose of contents/container to (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/supplier or the competent authority. | | | |

CORROSIVE TO METALS (CHAPTER 2.16)

Symbol Corrosion

Hazard category

Signal word

Hazard statement

1

Warning

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/supplier or the competent authority. | | | | |

ACUTE TOXICITY - ORAL (CHAPTER 3.1)

Symbol

Skull and crossbones

Hazard category Signal word Hazard statement

Danger Fatal if swallowed

2 Danger Fatal if swallowed



| Precautionary statements | | | | | | |
|---|--|---|--|--|--|--|
| Response | Storage | Disposal | | | | |
| F SWALLOWED: Immediately call a OISON CENTER or doctor/physician. Cinse mouth. pecific treatment (see on this label) reference to supplemental first aid a instruction if immediate administration of antidote is | Store locked up. | Dispose of contents/container to (in accordance with local/regional/national/international regulation). | | | | |
| Cii p | Response SWALLOWED: Immediately call a DISON CENTER or doctor/physician. nse mouth. ecific treatment (see on this label) reference to supplemental first aid truction | Response SWALLOWED: Immediately call a DISON CENTER or doctor/physician. nse mouth. ecific treatment (see on this label) reference to supplemental first aid truction if immediate administration of antidote is | | | | |

ACUTE TOXICITY - ORAL (CHAPTER 3.1)

Symbol

Skull and crossbones

Hazard category

Signal word

Hazard statement

3

Danger

Toxic if swallowed



| | Precautionary statements | | | | | | |
|-----|--|---|------------------|---|--|--|--|
| | Prevention | Response | Storage | Disposal | | | |
| pro | not eat, drink or smoke when using this oduct. ash hands thoroughly after handling. | IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Specific treatment (see on this label) reference to supplemental first aid instruction - if immediate administration of antidote is required. | Store locked up. | Dispose of contents/container to (in accordance with local/regional/national/international regulation). | | | |

Symbol

Exclamation mark

Hazard category Signal word Hazard statement

Warning Harmful if swallowed



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

| Symbol | |
|-----------|--|
| No symbol | |

Hazard category Signal word Hazard statement

5 Warning May be harmful if swallowed

| Precautionary statements | | | |
|--------------------------|---|---------|----------|
| Prevention | Response | Storage | Disposal |
| | Call a POISON CENTER/doctor/physician if you feel unwell. | | |

Symbol

Skull and crossbones



Hazard category Signal word Hazard statement

Danger Fatal in contact with skin Danger Fatal in contact with skin

| Precautionary statements | | | |
|---|---|------------------|---|
| Prevention | Response | Storage | Disposal |
| Do not eat, drink or smoke 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/supplier or the competent authority. | Remove/Take off immediately all contaminated clothing. IF ON SKIN: Gently wash with plenty of soap and water. Immediately call a POISON 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 contents/container to (in accordance with local/regional/national/international regulation). |

Symbol

Skull and crossbones

Hazard category

Signal word

Hazard statement

3

Danger

Toxic in contact with skin



| Precautionary statements | | | |
|---|---|------------------|---|
| Prevention | Response | Storage | Disposal |
| Wear protective gloves/clothing as specified by the manufacturer/supplier or the competent authority. | Remove/Take off immediately all contaminated clothing. IF ON SKIN: Wash with plenty of soap and water. | Store locked up. | Dispose of contents/container to (in accordance with local/regional/national/international regulation). |
| | Call a POISON 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. | | |

Symbol

Exclamation mark

Hazard category

Signal word

Hazard statement

4

Warning

Harmful in contact with skin



| Precautionary statements | | | |
|---|---|---------|---|
| Prevention | Response | Storage | Disposal |
| Wear protective gloves/clothing as specified by the manufacturer/supplier or the competent authority. | IF ON SKIN: Wash with plenty of soap and water. Call a POISON 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. | - | Dispose of contents/container to (in accordance with local/regional/national/international regulation). |
| | Wash contaminated clothing before reuse. | | |

| Symbol | |
|-----------|--|
| Vo symbol | |

Hazard category Signal word Hazard statement

5 Warning May be harmful in contact with skin

| Precautionary statements | | | |
|--------------------------|--|---------|----------|
| Prevention | Response | Storage | Disposal |
| | Call a POISON CENTER or doctor/physician if you feel unwell. | | |

Symbol

Skull and crossbones



Hazard category Signal word Hazard statement

Danger Fatal if inhaled
Danger 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/supplier or the competent authority. | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON 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 well-ventilated place - if product is as volatile as to generate hazardous atmosphere. | Dispose of contents/container to (in accordance with local/regional/national/international regulation). |

Symbol

Skull and crossbones

Hazard category

Signal word

Hazard statement

3

Danger

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 CENTER or doctor/physician. | Store locked up. Store container tightly closed in well-ventilated place - if product is as volatile as to generate hazardous atmosphere. | |
| | Specific treatment (see on this label) reference to supplemental first aid instruction - if immediate specific measures are required. | | |

Symbol

Exclamation mark

Hazard category Signal word Hazard statement

4 Warning 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 CENTER or doctor/physician if you feel unwell | | |

| Symbol | |
|-----------|--|
| No symbol | |

Hazard category Signal word Hazard statement

5 Warning May be harmful if inhaled

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

SKIN CORROSION/IRRITATION (CHAPTER 3.2)

Symbol Corrosion

Hazard category

Signal word

Hazard statement

1A to 1C

Danger

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/supplier or the competent authority. Wash thoroughly after handling. Do not breathe dust or mist - if inhalable particles may occur during use. | IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. 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. | Storage Store locked up. | Dispose of contents/container to (in accordance with local/regional/national/international regulation). | | |
| | Immediately call a POISON 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/supplier or the competent authority. | | | | |

SKIN CORROSION/IRRITATION (CHAPTER 3.2)

Symbol

Exclamation mark

Hazard category Signal word Hazard statement

Warning Causes skin irritation



| Precautionary statements | | | | |
|---|--|---------|----------|--|
| Prevention | Response | Storage | Disposal | |
| Wear protective gloves as specified by the manufacturer/supplier or the competent 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/supplier or the competent authority. | | | |

SKIN CORROSION/IRRITATION (CHAPTER 3.2)

| Symbol | |
|-----------|--|
| No symbol | |

Hazard category Signal word Hazard statement

Warning Causes mild skin irritation

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

EYE DAMAGE/IRRITATION (CHAPTER 3.3)

| Symbol | |
|-----------|--|
| Corrosion | |

Hazard category Signal word Hazard statement

Danger Causes serious eye damage



| Precautionary statements | | | |
|--|--|---------|----------|
| Prevention | Response | Storage | Disposal |
| Wear eye/face protection as specified by the manufacturer/supplier or the competent 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 CENTER or doctor/physician. | | |

EYE DAMAGE/IRRITATION (CHAPTER 3.3)

Symbol

Exclamation mark

Hazard category Signal word Hazard statement

2A Warning Causes serious eye irritation



| Precautionary statements | | | | |
|--|--|---------|----------|--|
| Prevention | Response | Storage | Disposal | |
| Wear eye/face protection as specified by the manufacturer/supplier or the competent 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. Wash hands after handling | | | |

EYE DAMAGE/IRRITATION (CHAPTER 3.3)

| Symbol | |
|-----------|--|
| No symbol | |

Hazard categorySignal wordHazard statement2BWarningCauses 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. Wash hands after handling | | | |

SENSITIZATION - RESPIRATORY (CHAPTER 3.4)

Symbol

Health hazard

Hazard category

Signal word

Hazard statement

1

Danger

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/supplier or the competent authority. | IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms call a POISON CENTER or doctor/physician. | | Dispose of contents/container to (in accordance with local/regional/national/international regulation). | |

SENSITIZATION - SKIN (CHAPTER 3.4)

Symbol

Exclamation mark

Hazard category

Signal word

Hazard statement

1

Warning

May cause an allergic skin reaction



| Precautionary statements | | | |
|--|---|---------|---|
| Prevention | Response | Storage | Disposal |
| Wear protective gloves as specified by the manufacturer/supplier or the competent 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/supplier or the competent authority. Wash contaminated clothing before reuse. | | Dispose of contents/container to (in accordance with local/regional/national/international regulation). |

GERM CELL MUTAGENICITY (CHAPTER 3.5)

Symbol

Health hazard

| Hazard category | Signal word | Hazard statement |
|-----------------|-------------|--------------------|
| | | iiuzui u stutement |

May cause genetic defects <...> Danger

Warning Suspected of causing genetic defects <...> 2

<...> (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 contents/container to (in accordance with local/regional/national/international regulation). | |

CARCINOGENICITY (CHAPTER 3.6)

Symbol

Health hazard

Hazard category Signal word Hazard statement

Danger May cause cancer <...>

2 Warning Suspected of causing cancer <...>

<...> (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 contents/container to (in accordance with local/regional/national/international regulation). | |

TOXIC TO REPRODUCTION (CHAPTER 3.7)

Symbol

Health hazard

| Hazard category | Signal word | Hazard statement |
|-----------------|-------------|------------------|
| | | |

Danger May damage fertility or the unborn child <...> <<...>>

2 Warning 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 contents/container to (in accordance with local/regional/national/international regulation). | |

TOXIC TO REPRODUCTION (CHAPTER 3.7)

(effects on or via lactation)

| Symbol | |
|-----------|--|
| No symbol | |

Hazard category Signal word Hazard statement

(additional) No signal word 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 | | | | |

SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (SINGLE EXPOSURE) (CHAPTER 3.8)

Symbol

Health hazard

Hazard category Signal word Hazard statement

Danger Causes damage to organs <...> <<...>>

<...> (or state all organs affected 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 | |
| , | Do not eat, drink or smoke when using this product. | IF exposed: Call a POISON CENTER or doctor/physician. | Store locked up. | Dispose of contents/container to (in accordance with | |
| 272 | Wash hands thoroughly after handling. Do not breathe dust/fume/gas/mist/vapours/spray. | Specific treatment (see on this label) reference to supplemental first aid instruction - if immediate measures are required. | | local/regional/national/international regulation). | |

SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (SINGLE EXPOSURE) (CHAPTER 3.8)

Symbol

Health hazard

Hazard category Signal word Hazard statement

2 Warning May cause damage to organs <...> <<...>>.

<...> (or state all organs affected, 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 | |
| 7.7.0 | Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Do not breathe dust/fume/gas/mist/vapours/spray. | Call a POISON CENTER or doctor/physician if exposed or you feel unwell. | Store locked up. | Dispose of contents/container to (in accordance with local/regional/national/international regulation). | |

SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (SINGLE EXPOSURE) (CHAPTER 3.8)

Symbol

Exclamation mark

Hazard category Signal word Hazard statement

Warning

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 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 well-ventilated place - if product is as volatile as to generate hazardous atmosphere. | Dispose of contents/container to (in accordance with local/regional/national/international regulation). | | |

SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (REPEATED EXPOSURE) (CHAPTER 3.9)

Symbol

Health hazard

Hazard category Signal word Hazard statement

Danger Causes damage to organs <...> through prolonged or repeated exposure

<<...>>.

<...> (state all organs affected, 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 | |
| 20 | Do not eat, drink or smoke when using this product. | Get medical attention/advice if you feel unwell. | | Dispose of contents/container to (in accordance with | |
| | Wash hands thoroughly after handling. | | | local/regional/national/international regulation). | |
| | Do not breathe dust/fume/gas/mist/vapours/spray. | | | , | |

SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY (REPEATED EXPOSURE) (CHAPTER 3.9)

Symbol Health hazard

Hazard category Signal word Hazard statement

2 Warning May cause damage to organs <...> through prolonged or repeated exposure

<<...>>.

<...> (state all organs affected, 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 | |
| Do not breathe dust/fume/gas/mist/vapours/spray. | Get medical attention/advice if you feel unwell. | | Dispose of contents/container to (in accordance with local/regional/national/international regulation). | |

ASPIRATION TOXICITY (CHAPTER 3.10)

Symbol

Health hazard

Hazard category Signal word Hazard statement

Danger May be fatal if swallowed and enters airways

Warning May be harmful if swallowed and enters airways



| Precautionary statements | | | | | |
|--------------------------|--|------------------|---|--|--|
| Prevention | Response Storage D | | | | |
| | IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. | Store locked up. | Dispose of contents/container to (in accordance with local/regional/national/international regulation). | | |

HAZARDOUS TO THE AQUATIC ENVIRONMENT - ACUTE HAZARD (CHAPTER 4.1)

Symbol Environment

Hazard category Signal word

Hazard statement

1

Warning 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 contents/container to (in accordance with local/regional/national/international regulation). |

HAZARDOUS TO THE AQUATIC ENVIRONMENT - ACUTE HAZARD (CHAPTER 4.1)

| Symbol | |
|-----------|--|
| No symbol | |

Hazard categorySignal wordHazard statement2No signal wordToxic to aquatic life3No signal wordHarmful to aquatic life

| Precautionary statements | | | |
|---|--|--|---|
| Prevention Response Storage Disposa | | | |
| Avoid release to the environment - if this is not the intended use. | | | Dispose of contents/container to (in accordance with local/regional/national/international regulation). |

HAZARDOUS TO THE AQUATIC ENVIRONMENT - CHRONIC HAZARD (CHAPTER 4.1)

Symbol Environment

Hazard category Signal word Hazard statement

Warning Very toxic to aquatic life with long lasting effects

2 No signal word Toxic to aquatic life with long lasting effects



| Precautionary statements | | | |
|---|-------------------|--|--|
| Prevention | Disposal | | |
| Avoid release to the environment - if this is not the intended use. | Collect spillage. | | Dispose of contents/container to (in accordance with local/regional/national/internation al regulation). |

HAZARDOUS TO THE AQUATIC ENVIRONMENT - CHRONIC HAZARD (CHAPTER 4.1)

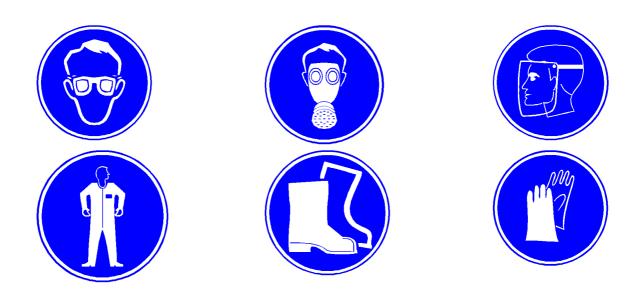
| Symbol | |
|--------------|--|
| $No\ symbol$ | |

| Hazard category | Signal word | Hazard statement |
|-----------------|----------------|--|
| 3 | No signal word | Harmful to aquatic life with long lasting effects |
| 4 | No signal word | May cause long lasting harmful effects to aquatic life |

| Precautionary statements | | | |
|---|--|--|---|
| Prevention Response Storage Disp | | | |
| Avoid release to the environment - if this is not the intended use. | | | Dispose of contents/container to (in accordance with local/regional/national/international regulation). |

A3.7 Precautionary pictograms

From European Union (Council Directive 92/58/EEC of 24 June 1992)



From South African Bureau of Standards (SABS 0265:1999)















