#### UN/SCEGHS/32/INF.3/Add.2

Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals

Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals Thirty-second session
Geneva, 7–9 (morning) December 2016
Item 3 (b) of the provisional agenda
Hazard communication issues: Improvement of annexes 1 to 3 and further rationalization of precautionary statements

15 September 2016

Addendum to document ST/SG/AC.10/C.4/2016/17: Proposed changes to section 3 (matrix tables) of Annex 3 of the GHS

Transmitted by the expert from the United Kingdom on behalf of the correspondence group on improving annexes 1, 2 and 3 of the GHS

#### **Background**

- 1. This addendum shows marked up changes to table A3.3.5 in Section 3 of Annex 3 of the GHS "Matrix of precautionary statements by hazard class category", as indicated in document ST/SG/AC.10/2016/17, paragraph 9.
- 2. New proposed wording is shown in underlined italics, *thus*.
- 3. The symbol and accompanying description have been moved from the right of the page to be included in the columns, this is not shown in the mark up.
- 4. Where a new line has been included in its entirety (e.g. Explosives Division 1.5 on page 3) this has been moved from a previously separate page. These formerly separate pages are not shown.

# Changes to the matrix tables in Section 3 of Annex 3 of the GHS "Matrix of precautionary statements by hazard class category",

#### **EXPLOSIVES** (CHAPTER 2.1)

Hazard category Symbol Signal word(s) Hazard statement (s)

Unstable explosive <u>Exploding bomb</u> Danger H200 Unstable explosive

	Precautionary statements							
Prevention	Prevention Response Storage Disposal							
P201 Obtain special instructions before use. P250 Do not subject to grinding/shock/friction/  - if the explosive is mechanically sensitive. Manufacturer/supplier or the competent authority to specify applicable rough handling.	P370 + P372 + P380 + P373 In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives.	P401 Store in accordance with Manufacturer/supplier or the competent authority to specify local/regional/ national/international regulations as applicable.	Dispose of contents/container toin accordance with local/regional/ national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.					
P280 Wear protective gloves/protective clothing/eye protection/face protection.  Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.								

#### EXPLOSIVES (CHAPTER 2.1)

Hazard category	Symbo	<u>!</u>	Signal word	Hazard sta	tement
Division 1.1	Exploding bomb	1//	Danger	H200	Explosive; mass explosion hazard
Division 1.2	Exploding bomb		Danger	H202	Explosive; severe projection hazard
Division 1.3	Exploding bomb		Danger	H203	Explosive; fire, blast or projection hazard
Division 1.5	<u>No symbol</u>	<u>No symbol</u>	<u>Danger</u>	<u>H205</u>	May mass explode in fire

#### EXPLOSIVES (CHAPTER 2.1)

Hazard category Symbol Signal word Hazard statement

Division 1.4 <u>Exploding bomb</u> Warning H204 Fire or projection hazard

·/ ×							
	Precautionary statements						
Prevention	Response	Storage	Disposal				
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P234 Keep only in original packaging. P240 Ground and bond container and receiving equipment.  – if the explosive is electrostatically sensitive.	P370 + P372 + P380 + P373 In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives.  - except for explosives of division 1.4 (compatibility group S) in transport packaging.  P370 + P380 + P375 In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.  - for explosives of division 1.4 (compatibility group S) in transport reaches in the results of the results of explosion.	P401 Store in accordance with Manufacturer/supplier or the competent authority to specify local/regional/ national/international regulations as applicable.	P501  Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).  Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.				
P250  Do not subject to grinding/shock/friction/  - if the explosive is mechanically sensitiveManufacturer/supplier or the competent authority to specify applicable rough handling.  P280  Wear protective gloves/protective	group S) in transport packaging.						
clothing/eye protection/face protection.  Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.							

#### FLAMMABLE GASES (CHAPTER 2.2) (Flammable gases)

Hazard category Signal word Hazard statement

<u>Flame</u>

1

\*

Danger H220 Extremely flammable gas

<u>No symbol</u> <u>No symbol</u> <u>Warning</u> <u>H221</u> <u>Flammable gas</u>

Precautionary statements				
Prevention	Response	Storage	Disposal	
P210	P377	P403		
Keep away from heat, hot surfaces, sparks,	Leaking gas fire:	Store in a well-ventilated place.		
open flames and other ignition sources. No smoking.	Do not extinguish, unless leak can be stopped safely.			
	P381			
	In case of leakage, eliminate all ignition sources.			

#### FLAMMABLE GASES (CHAPTER 2.2) (Pyrophoric gases)

(- J--F----- games)

Hazard category Symbol Signal word Hazard statement

Pyrophoric gas <u>Flame</u> Danger H232 May ignite spontaneously if exposed to air

Precautionary statements				
Prevention	Response	Storage	Disposal	
P222  Do not allow contact with air.  - if emphasis of the hazard statement is deemed necessary.				
P280 Wear protective gloves/protective clothing/eye protection/face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.				

**Note**: This table lists only precautionary statements that are assigned due to the pyrophoricity of the gas. For the other precautionary statements that are assigned based on the flammability, see the respective tables for flammable gases.

# UN/SCEGHS/32/INF.3/Add.2

### FLAMMABLE GASES (CHAPTER 2.2)

#### (Chemically unstable gases)

Hazard category	<u>Symbol</u>	Signal word	Hazard	statement
A	No additional symbol	No additional signal word	H230	May react explosively even in the absence of air
В	No additional symbol	No additional signal word	H231	May react explosively even in the absence of air at elevated pressure and/or temperature

Precautionary statements				
Prevention	Response	Storage	Disposal	
P202 Do not handle until all safety precautions have been read and understood.				

**Note:** This table lists only the precautionary statement that is assigned due to the chemical instability of the gas. For the other precautionary statements that are assigned based on the flammability see the respective tables for flammable gases.

#### AEROSOLS (CHAPTER 2.3)

Hazard category	<u>Symbol</u>	Signal word	Hazard	l statement
1	Elamo	Dangar	H222	Extremely flammable aerosol
1	Flame	Danger	H229	Pressurized container: may burst if heated
2	<u>Flame</u>	Warning	H223	Flammable aerosol
			H229	Pressurized container: may burst if heated

Precautionary statements				
Prevention	Response	Storage	Disposal	
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.		P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.		
P211 Do not spray on an open flame or other ignition source.		Manufacturer/supplier or the competent authority to use applicable temperature scale.		
P251 Do not pierce or burn, even after use.				

#### AEROSOLS (CHAPTER 2.3)

Hazard categorySymbolSignal wordHazard statement3No symbolWarningH229Pressurized container: may burst if heated

Precautionary statements				
Prevention	Response	Storage	Disposal	
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P251 Do not pierce or burn, even after use.		P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.  Manufacturer/supplier or the competent authority to use applicable temperature scale.		

#### OXIDIZING GASES (CHAPTER 2.4)

Hazard category Signal word Hazard statement

<u>Flame over circle</u>

1



Danger

May cause or intensify fire; oxidizer

Precautionary statements				
Prevention	Response	Storage	Disposal	
P220 Keep away from clothing and other combustible materials. P244 Keep valves and fittings free from oil and grease.	P370 + P376 In case of fire: Stop leak if safe to do so.	P403 Store in a well-ventilated place.		

#### GASES UNDER PRESSURE (CHAPTER 2.5)

Hazard category	Syn	<u>ıbol</u>	Signal word	Hazard	statement
Compressed gas	Gas cylinder		Warning	H280	Contains gas under pressure; may explode if heated
Liquefied gas	Gas cylinder		Warning	H280	Contains gas under pressure; may explode if heated
Dissolved gas	<u>Gas cylinder</u>		Warning	H280	Contains gas under pressure; may explode if heated

Precautionary statements					
Prevention	Response	Storage	Disposal		
		P410 + P403			
		Protect from sunlight. Store in a well-			
		ventilated place.			
		- P410 may be omitted for gases filled in			
		transportable gas cylinders in accordance			
		with packing instruction P200 of the UN			
		Recommendations on the Transport of			
		Dangerous Goods, Model Regulations, unless			
		those gases are subject to (slow)			
		decomposition or polymerisation, or the			
		competent authority provides otherwise.			

#### GASES UNDER PRESSURE (CHAPTER 2.5)

Hazard category Signal word Hazard statement

	Precautionary statements				
Prevention	Response	Storage	Disposal		
P282 Wear cold insulating gloves and either face shield or eye protection.	P336 + P315 Thaw frosted parts with lukewarm water. Do not rub affected area. Get immediate medical advice/attention. Manufacturer/supplier or the competent authority to select medical advice or attention as appropriate.	P403 Store in a well-ventilated place.			

#### FLAMMABLE LIQUIDS (CHAPTER 2.6)

Hazard category	<u>Symbol</u>	Signal word	Hazaro	l statement
1	<u>Flame</u>	Danger	H224	Extremely flammable liquid and vapour
2	<u>Flame</u>	Danger	H225	Highly flammable liquid and vapour
3	<u>Flame</u>	Warning	H226	Flammable liquid and vapour

5 <u>riame</u>	warning H.	220 Fiaiiiiiabie iiquid and	vapour
	Precautionary statements		
Prevention	Response	Storage	Disposal
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  P233  Keep container tightly closed.  — if the liquid is volatile and may generate an explosive atmosphere.  P240  Ground and bond container and receiving equipment.  — if the liquid is volatile and may generate an explosive atmosphere.  P241  Use explosion-proof [electrical/ventilating/lighting/] equipment.  — if the liquid is volatile and may generate an explosive atmosphere.  — text in square brackets may be used to specify specific electrical, ventilating, lighting or other equipment if necessary and as appropriate.  — precautionary statement may be omitted where local or national legislation introduces more specific provisions  P242  Use non-sparking tools.  — if the liquid is volatile and may generate an explosive atmosphere and if the minimum ignition energy is very low. (This applies to substances and mixtures where the minimum ignition energy is <0.1mJ, e.g. carbon disulphide).  P243  Take action to prevent static discharges.  — if the liquid is volatile and may generate an explosive atmosphere.  — may be omitted where local or national legislation introduces more specific provisions.  P280  Wear protective gloves/protective clothing/eye protection/face protection  Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.	P303 + P361 + P353  IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  - text in square brackets to be included where the manufacturer/supplier or the competent authority considers it appropriate for the specific chemical.  P370 + P378  In case of fire: Use to extinguish.  - if water increases risk.  Manufacturer/supplier or the competent authority to specify appropriate media.	P403 + P235 Store in a well-ventilated place. Keep cool.  – for flammable liquids Category 1 and other flammable liquids that are volatile and may generate an explosive atmosphere.	P501  Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).  Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.

#### FLAMMABLE LIQUIDS (CHAPTER 2.6)

Hazard category Symbol Signal word Hazard statement

4 <u>No symbol</u> Warning H227 Combustible liquid

Precautionary statements				
Prevention	Response	Storage	Disposal	
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P280 Wear protective gloves/protective clothing/eye protection/face protection Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.	P370 + P378  In case of fire: Use to extinguish.  — if water increases risk.  Manufacturer/supplier or the competent authority to specify appropriate media.	P403 Store in a well-ventilated place.  — for flammable liquids Category I and other flammable liquids that are volatile and may generate an explosive atmosphere.	P501  Dispose of contents/container toin accordance with local/regional/ national/international regulations (to be specified).  Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.	

# FLAMMABLE SOLIDS (CHAPTER 2.7)

Hazard category Symbol Signal word Hazard statement

<u>Flame</u> Danger H228 Flammable solid

Flame Warning H228 Flammable solid

	Precautionary statements		
Prevention	Response	Storage	Disposal
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P240 Ground and bond container and receiving equipment.  – if the solid is electrostatically sensitive.	P370 + P378  In case of fire: Use to extinguish  – if water increases risk.  Manufacturer/supplier or the competent authority to specify appropriate media.		
P241 Use explosion-proof [electrical/ventilating/lighting/]equipment.  - if dust clouds can occur.  - text in square brackets may be used to specify specific electrical, ventilating, lighting or other equipment if necessary and as appropriate.  - precautionary statement may be omitted where local or national legislation introduces more specific provisions.			
P280 Wear protective gloves/ protective clothing/eye protection/face protection Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.			

1

#### SELF-REACTIVE SUBSTANCES AND MIXTURES (CHAPTER 2.8)

Hazard category Symbol Signal word Hazard statement

Type A <u>Exploding bomb</u> Danger H240 Heating may cause an explosion

	Precautionary staten	nents	
Prevention	Response	Storage	Disposal
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P234 Keep only in original packaging. P235 Keep cool.  - may be omitted if P411 is given on the label. P240 Ground and bond container and receiving equipment.  - if electrostatically sensitive and able to generate an explosive atmosphere. P280 Wear protective gloves/protective clothing/eye protection/face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.	P370 + P372 + P380 + P373 In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives.	P403 Store in a well-ventilated place.  - except for temperature controlled self-reactive substances and mixtures or organic peroxides because condensation and consequent freezing may take place.  P411 Store at temperatures not exceeding °C/ °F.  - if temperature control is required (according to section 2.8.2.3 or 2.15.2.3 of the GHS) or if otherwise deemed necessary.  Manufacturer/supplier or the competent authority to specify temperature using applicable temperature scale.  P420 Store separately.	Dispose of contents/container to in accordance with local/regional/national/internatio al regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.

# UN/SCEGHS/32/INF.3/Add.2

#### SELF-REACTIVE SUBSTANCES AND MIXTURES (CHAPTER 2.8)

Hazard category Signal word Hazard statement

Type B <u>Exploding bomb and Flame</u>





Danger H241 Heating may cause a fire or explosion

	Precautionary state	ements	
Prevention	Response	Storage	Disposal
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P234 Keep only in original packaging. P235 Keep cool  - may be omitted if P411 is given on the label. P240 Ground and bond container and receiving equipment.  - if electrostatically sensitive and able to generate an explosive atmosphere. P280 Wear protective gloves/protective clothing/eye protection/face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.	P370 + P380 + P375 [+ P378] In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. [Useto extinguish]  - text in square brackets to be included if water increases risk.  Manufacturer/supplier or the competent authority to specify appropriate media.	P403 Store in a well-ventilated place.  - except for temperature controlled self-reactive substances and mixtures or organic peroxides because condensation and consequent freezing may take place. P411 Store at temperatures not exceeding°C/°F.  - if temperature control is required (according to section 2.8.2.3 or 2.15.2.3 of the GHS) or if otherwise deemed necessary.  Manufacturer/supplier or the competent authority to specify temperature using applicable temperature scale. P420 Store separately.	P501  Dispose of contents/container toin accordance with local/regional/national/international regulations (to be specified).  Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.

#### SELF-REACTIVE SUBSTANCES AND MIXTURES (CHAPTER 2.8)

Hazard category	<u>Symbol</u>	Signal word	Hazard	l statement
Type C	<u>Flame</u>	Danger	H242	Heating may cause a fire
Type D	<u>Flame</u>	Danger	H242	Heating may cause a fire
Type E	<u>Flame</u>	Warning	H242	Heating may cause a fire
Type F	<u>Flame</u>	Warning	H242	Heating may cause a fire

	Precautionary state	ments	
Prevention	Response	Storage	Disposal
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P234 Keep only in original packaging. P235 Keep cool — may be omitted if P411 is given on the label. P240 Ground and bond container and receiving equipment. — if electrostatically sensitive and able to generate an explosive atmosphere. P280 Wear protective gloves/protective clothing/eye protection/face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.	P370 + P378  In case of fire: Use to extinguish  - if water increases risk.  Manufacturer/supplier or the competent authority to specify appropriate media.	P403 Store in a well-ventilated place.  - except for temperature controlled self-reactive substances and mixtures or organic peroxides because condensation and consequent freezing may take place. P411 Store at temperatures not exceeding°C/°F.  - if temperature control is required (according to section 2.8.2.3 or 2.15.2.3 of the GHS) or if otherwise deemed necessary. Manufacturer/supplier or the competent authority to specify temperature using applicable temperature scale. P420 Store separately.	P501  Dispose of contents/container toin accordance with local/regional/national/internation al regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.

#### PYROPHORIC LIQUIDS (CHAPTER 2.9)

Hazard category Symbol Signal word Hazard statement

<u>Flame</u>

1



Danger H250 Catches fire spontaneously if exposed to air

Precautionary statements			
Prevention	Response	Storage	Disposal
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.	P302 + P334  IF ON SKIN: Immerse in cool water or wrap in wet bandages.  P370 + P378		
P222 <b>Do not allow contact with air.</b> – if emphasis of the hazard statement is deemed necessary.	In case of fire: Use to extinguish  — if water increases risk. Manufacturer/supplier or the competent authority to specify appropriate media.		
P231 + P232  Handle and store contents under inert gas/ Protect from moistureManufacturer/supplier or the competent authority to specify appropriate liquid or gas if "inert gas" is not appropriate.			
P233 Keep container tightly closed.			
P280 Wear protective gloves/protective clothing/eye protection/face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.			

#### PYROPHORIC SOLIDS (CHAPTER 2.10)

Hazard category Symbol Signal word Hazard statement

Danger H250 Catches fire spontaneously if exposed to air

Precautionary statements					
Prevention	Response	Storage	Disposal		
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.	P302 + P335 + P334  IF ON SKIN: Brush off loose particles from skin. Immerse in cool water or wrap in wet bandages.				
P222  Do not allow contact with air.  — if emphasis of the hazard statement is deemed necessary.  P231 + P232  Handle and store contents under inert gas/ Protect from moisture. Manufacturer/supplier or the competent authority to specify appropriate liquid or gas if "inert gas" is not appropriate.	P370 + P378  In case of fire: Use to extinguish  — if water increases risk.  Manufacturer/supplier or the competent authority to specify appropriate media.				
P233 Keep container tightly closed. P280 Wear protective gloves/protective clothing/eye protection/face protection Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.					

## SELF-HEATING SUBSTANCES AND MIXTURES (CHAPTER 2.11)

Hazard category Symbol Signal word Hazard statement

Flame Danger H251 Self-heating; may catch fire

Flame Warning H252 Self-heating in large quantities; may catch fire

Precautionary statements				
Prevention	Response	Storage	Disposal	
P235  Keep cool.  – may be omitted if P413 is given on the		P407 Maintain air gap between stacks or pallets.		
label. P280 Wear protective gloves/protective clothing/eye protection/face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.		P413 Store bulk masses greater than kg/lbs at temperatures not exceeding°C/°F Manufacturer/supplier or the competent authority to specify mass and temperature using applicable scale. P420 Store separately.		

1

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

Hazard categorySymbolSignal wordHazard statement1FlameDangerH260In contact with water releases flammable gases, which may ignite spontaneously

Danger H261 In contact with water releases flammable gas

Proceedings and the second					
Precautionary statements					
Prevention	Response	Storage	Disposal		
P223 Do not allow contact with water.  - if emphasis of the hazard statement is deemed necessary.  P231 + P232 Handle and store contents under inert gas/ Protect from moisture.  - if the substance or mixture reacts	P302 + P335 + P334  IF ON SKIN: Brush off loose particles from skin and immerse in cool water.  P370 + P378  In case of fire: Use to extinguish - if water increases risk Manufacturer/supplier or the	P402 + P404 Store in a dry place. Store in a closed container.	P501  Dispose of contents/container toin accordance with local/regional/national/ international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.		
readily with moisture in airManufacturer/supplier or the competent authority to specify appropriate liquid or gas if "inert gas" is not appropriate.	competent authority to specify appropriate media.				
P280 Wear protective gloves/protective clothing/eye protection/face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.					

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

Hazard category Signal word Hazard statement

Warning H261 In contact with water releases flammable gas

Precautionary statements					
Prevention	Response	Storage	Disposal		
Handle and store contents under inert gas/ Protect from moisture.  - if the substance or mixture reacts readily with moisture in air.  Manufacturer/supplier or the competent authority to specify appropriate liquid or gas if "inert gas" is not appropriate.  P280  Wear protective gloves/protective clothing/eye protection/face protection.  Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.	P370 + P378  In case of fire: Use to extinguish.  - if water increases risk.  Manufacturer/supplier or the competent authority to specify appropriate media.	P402 + P404 Store in a dry place. Store in a closed container.	P501  Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.		

#### OXIDIZING LIQUIDS (CHAPTER 2.13)

Hazard category Symbol Signal word Hazard statement

Flame over circle



Danger H271 May cause fire or explosion; strong oxidizer

Precautionary statements					
Prevention	Response	Storage	Disposal		
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  P220 Keep away from clothing and other combustible materials.  P280 Wear protective gloves/protective clothing/eye protection/face protection.  Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.  P283 Wear fire resistant or flame retardant clothing.	P306 + P360  IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.  P371 + P380 + P375  In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.  P370 + P378  In case of fire: Use to extinguish.  — if water increases risk  Manufacturer/supplier or the competent authority to specify appropriate media.	P420 Store separately.	Dispose of contents/container to in accordance with local/regional national/international regulations (to be specified).  Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.		

#### OXIDIZING LIQUIDS (CHAPTER 2.13)

Hazard category Symbol Signal word Hazard statement

2 <u>Flame over circle</u> Danger H272 May intensify fire; oxidizer

Flame over circle Warning H272 May intensify fire; oxidizer

Precautionary statements					
Prevention	Response	Storage	Disposal		
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P220 Keep away from clothing and other combustible materials. P280 Wear protective gloves/protective clothing/eye protection/face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.	P370 + P378  In case of fire: Use to extinguish.  — if water increases risk.  Manufacturer/supplier or the competent authority to specify appropriate media.		Dispose of contents/container toin accordance with local/regional/ national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.		

#### OXIDIZING SOLIDS (CHAPTER 2.14)

Hazard category Symbol Signal word Hazard statement

Flame over circle



Danger H271 May cause fire or explosion; strong oxidizer

Precautionary statements					
Prevention	Response	Storage	Disposal		
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P220 Keep away from clothing and other combustible materials. P280 Wear protective gloves/protective clothing/eye protection/face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment. P283 Wear fire resistant or flame retardant clothing.	P306 + P360 IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.  P371 + P380 + P375 In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.  P370 + P378 In case of fire: Use to extinguish.  — if water increases risk.  Manufacturer/supplier or the competent authority to specify appropriate media.	P420 Store separately.	P501  Dispose of contents/container to in accordance with local/regional/ national/international regulations (to be specified).  Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.		

#### OXIDIZING SOLIDS (CHAPTER 2.14)

Hazard category Symbol Signal word Hazard statement

2 <u>Flame over circle</u> Danger H272 May intensify fire; oxidizer

Flame over circle Warning H272 May intensify fire; oxidizer

Precautionary statements					
Prevention	Response	Storage	Disposal		
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P220 Keep away from clothing and other combustible materials. P280 Wear protective gloves/protective clothing/eye protection/face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.	P370 + P378  In case of fire: Use to extinguish.  — if water increases risk.  Manufacturer/supplier or the competent authority to specify appropriate media.		P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.		

#### ORGANIC PEROXIDES (CHAPTER 2.15)

Hazard category Symbol Signal word Hazard statement

Type A <u>Exploding bomb</u> Danger H240 Heating may cause an explosion

Precautionary statements					
Prevention R	se Storage	Disposal			
Prevention  Page 210  Keep away from heat, hot surfaces, parks, open flames and other ignition ources. No smoking.  Page 234  Keep only in original container.  Page 235  Keep cool.  Page 40  Ground and bond container and ecciving equipment.  If electrostatically sensitive and able to generate an explosive atmosphere.	P403 Store in a well-ventilated place.  - except for temperature controlled self-reactive substances and mixtures or organic peroxides because condensation and consequent freezing may take place.  P410 Protect from sunlight.  P411 Store at temperatures not exceeding °C/ °F.  - if temperature control is required (according to section 2.8.2.3 or 2.15.2.3 of the GHS) or if otherwise deemed necessary.  Manufacturer/supplier or the competent	P501 Dispose of contents/container to in accordance with local/regional/national/internationa regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both			
Wear protective gloves/ protective clothing/eye protection/face protection.  Manufacturer/supplier or the competent cuthority to specify the appropriate type	authority to specify temperature using applicable temperature scale P420 Store separately.				

#### ORGANIC PEROXIDES (CHAPTER 2.15)

Hazard category Signal word Hazard statement

Type B

Exploding bomb and Flame





Danger

H241

Heating may cause a fire or explosion

Precautionary statements					
Prevention	Response	Storage	Disposal		
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P234 Keep only in original packaging. P235 Keep cool.  — may be omitted if P411 is given on the label. P240 Ground and bond container and receiving equipment.  — if electrostatically sensitive and able to generate an explosive atmosphere. P280 Wear protective gloves/ protective clothing/eye protection/face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.	P370 + P380 + P375 [+ P378] In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. [Useto extinguish]  - text in square brackets to be used if water increases risk. Manufacturer/supplier or the competent authority to specify appropriate media.	P403 Store in a well-ventilated place.  - except for temperature controlled self-reactive substances and mixtures or organic peroxides because condensation and consequent freezing may take place.  P410 Protect from sunlight.  P411 Store at temperatures not exceeding °C/ °F.  - if temperature control is required (according to section 2.8.2.3 or 2.15.2.3 of the GHS) or if otherwise deemed necessary.  Manufacturer/supplier or the competent authority to specify temperature using applicable temperature scale.  P420 Store separately.	Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.		

#### ORGANIC PEROXIDES (CHAPTER 2.15)

Hazard category	Syn	<u>nbol</u>	Signal word	Hazard	statement
Type C	<u>Flame</u>	4	Danger	H242	Heating may cause a fire
Type D	<u>Flame</u>		Danger	H242	Heating may cause a fire
Type E	<u>Flame</u>		Warning	H242	Heating may cause a fire
Type F	<u>Flame</u>		Warning	H242	Heating may cause a fire

Type F Flame	warning	H242 Heating may caus	e a life		
Precautionary statements					
Prevention	Response	Storage	Disposal		
Reep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  P234  Keep only in original packaging.  P235  Keep cool.  — may be omitted if P411 is given on the label.  P240  Ground and bond container and receiving equipment.  — if electrostatically sensitive and able to generate an explosive atmosphere.  P280  Wear protective gloves/ protective clothing/eye protection/face protection.  Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.	P370 + P378 In case of fire: Use to extinguish.  — if water increases risk.  Manufacturer/supplier or the competent authority to specify appropriate media.	P403 Store in a well-ventilated place.  - except for temperature controlled self-reactive substances and mixtures or organic peroxides because condensation and consequent freezing may take place.  P410 Protect from sunlight.  P411 Store at temperatures not exceeding °C/ °F.  - if temperature control is required (according to section 2.8.2.3 or 2.15.2.3 of the GHS) or if otherwise deemed necessary  Manufacturer/supplier or the competent authority to specify temperature using applicable temperature scale.  P420 Store separately.	P501 Dispose of contents/container to in accordance with local/regional/national/internation al regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.		

#### CORROSIVE TO METALS (CHAPTER 2.16)

Hazard category Symbol Signal word Hazard statement

1 <u>Corrosion</u> Warning H290 May be corrosive to metals

Precautionary statements				
Prevention	Response	Storage	Disposal	
P234 Keep only in original packaging.	P390 Absorb spillage to prevent material damage.	P406 Store in a corrosion resistant/ container with a resistant inner liner. – may be omitted if P234 is given on the label Manufacturer/supplier or the competent authority to specify other compatible materials.		

#### DESENSITIZED EXPLOSIVES (CHAPTER 2.17)

Hazard category	<u>Symbol</u>	Signal word	Hazard	statement
1	<u>Flame</u>	Danger	H206	Fire, blast or projection hazard; increased risk of explosion if desensitizing agent is reduced
2	<u>Flame</u>	Danger	H207	Fire or projection hazard; increased risk of explosion if desensitizing agent is reduced
3	<u>Flame</u>	Warning	H207	Fire or projection hazard; increased risk of explosion if desensitizing agent is reduced

		is reduced					
	Precautionary statements						
Prevention	Response	Storage	Disposal				
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  P212  Avoid heating under confinement or reduction of the desensitizing agent.  P230  Keep wetted with Manufacturer/supplier or the competent authority to specify appropriate material.	P370+P380+P375 In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.	P401 Store in accordance withManufacturer/supplier or the competent authority to specify local/regional/ national/international regulations as applicable.	P501  Dispose of contents/containers toin accordance with local/regional/national /international regulations (to be specified).  Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.				
P233 Keep container tightly closed. P280							
Wear protective gloves/protective clothing/eye protection/face protection.							

#### DESENSITIZED EXPLOSIVES (CHAPTER 2.17)

Hazard category <u>Symbol</u> Signal word Hazard statement

<u>Flame</u>

4



Warning H208

Fire hazard; increased risk of explosion if desensitizing agent is reduced

Precautionary statements						
Prevention	Response	Storage	Disposal			
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P212 Avoid heating under confinement or reduction of the desensitizing agent. P230 Keep wetted withManufacturer/supplier or the competent authority to specify appropriate material.	P371+P380+P375 In case of major fire and large quantities: Evacuate-area. Fight fire remotely due to the risk of explosion.	P401 Store in accordance withManufacturer/supplier or the competent authority to specify local/regional/ national/international regulations as applicable.	P501  Dispose of contents/containers toin accordance with local/regional/national /international regulations (to be specified).  Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.			
P233 Keep container tightly closed.						
P280 Wear protective gloves/protective clothing/eye protection/face protection.						

#### ACUTE TOXICITY – ORAL (CHAPTER 3.1)

Hazard category	<u>Symbol</u>		Signal word	Hazard statement	
1	Skull and crossbones		Danger	H300	Fatal if swallowed
2	Skull and crossbones		Danger	H300	Fatal if swallowed
<u>3</u>	Skull and crossbones	<b>₹</b>	<u>Danger</u>	<u>H301</u>	Toxic if swallowed

Precautionary statements					
Prevention Response Storage Dis					
P264 Washthoroughly after handling Manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling. P270 Do not eat, drink or smoke when using this product.	P301 + P310  IF SWALLOWED: Immediately call a POISON CENTER/doctor/Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.  P321  Specific treatment (see on this label) - if immediate administration of antidote is required Reference to supplemental first aid instruction.  P330  Rinse mouth.	P405 Store locked up.	P501  Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).  Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.		

#### ACUTE TOXICITY – ORAL (CHAPTER 3.1)

Hazard category Symbol Signal word Hazard statement

Exclamation mark

Į

Warning H302 Harmful if swallowed

Precautionary statements					
Prevention	Response	Storage	Disposal		
P264 Wash thoroughly after handling Manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling. P270 Do not eat, drink or smoke when using this product.	P301 + P312  IF SWALLOWED: Call a POISON  CENTER/ doctor/if you feel unwellManufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.  P330  Rinse mouth.		P501  Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.		

#### ACUTE TOXICITY – ORAL (CHAPTER 3.1)

Hazard category	<u>Symbol</u>	Signal word	Hazard statement
-----------------	---------------	-------------	------------------

5 <u>No symbol</u> Warning H303 May be harmful if swallowed

	Precautionary statements				
Prevention	Response	Storage	Disposal		
	P301 + P312  IF SWALLOWED: Call a POISON  CENTER/doctor/if you feel unwellManufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.				

Hazard category	<u>Symbol</u>	Signal word	Hazard statem	ent
1	Skull and crossbones	Danger	H310	Fatal in contact with skin
2	Skull and crossbones	Danger	H310	Fatal in contact with skin

Precautionary statements					
Prevention	Response	Storage	Disposal		
P262 Do not get in eyes, on skin, or on clothing.  P264 Wash thoroughly after handlingManufacturer/supplier or the competent authority to specify parts of the body to be washed after handling.  P270 Do not eat, drink or smoke when using this product.  P280 Wear protective gloves/protective clothing. Manufacturer/supplier or the competent authority may further specify type of equipment where appropriate.	P302 + P352  IF ON SKIN: Wash with plenty of water/Manufacturer/supplier or the competent authority may specify a cleansing agent if appropriate, or may recommend an alternative agent in exceptional cases if water is clearly inappropriate.  P310  Immediately call a POISON CENTER/doctor/Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.  P321  Specific treatment (see on this label)  - if immediate measures such as specific cleansing agent is advised Reference to supplemental first aid instruction.  P361+ P364  Take off immediately all contaminated clothing and wash it before reuse.	P405 Store locked up.	Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.		

Hazard category <u>Symbol</u> Signal word Hazard statement

Skull and crossbones

3



Danger H311 Toxic in contact with skin

V V				
	Precautionary sta	tements		
Prevention	Response	Storage	Disposal	
P280 Wear protective gloves/protective clothing. Manufacturer/supplier or the competent authority may further specify type of equipment where appropriate.	P302 + P352  IF ON SKIN: Wash with plenty of water/Manufacturer/supplier or the competent authority may specify a cleansing agent if appropriate, or may recommend an alternative agent in exceptional cases if water is clearly inappropriate.  P312  Call a POISON CENTER/doctor/if you feel unwellManufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.  P321  Specific treatment (see on this label) – if immediate measures such as specific cleansing agent is advised Reference to supplemental first aid instruction.  P361 + P364  Take off immediately all contaminated clothing and wash it before reuse.	P405 Store locked up.	P501  Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).  Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.	

Hazard category Symbol Signal word Hazard statement

4 <u>Exclamation mark</u>

Ĭ

Warning H312 Harmful in contact with skin

Precautionary statements				
Prevention	Response	Storage	Disposal	
P280 Wear protective gloves/protective clothing Manufacturer/supplier or the competent authority may further specify type of equipment where appropriate.	P302 + P352  IF ON SKIN: Wash with plenty of water/Manufacturer/supplier or the competent authority may specify a cleansing agent if appropriate, or may recommend an alternative agent in exceptional cases if water is clearly inappropriate.  P312 Call a POISON CENTER/doctor/if you feel unwellManufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.  P321 Specific treatment (see on this label) - if immediate measures such as specific cleansing agent is advised Reference to supplemental first aid instruction.  P362 + P364 Take off contaminated clothing and wash it before reuse.		Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.	

Hazard category	<u>Symbol</u>	Signal word	Hazard statement
-----------------	---------------	-------------	------------------

5 <u>No symbol</u> Warning H313 May be harmful in contact with skin

Precautionary statements				
Prevention	Response	Storage	Disposal	
	P302 + P312  IF ON SKIN: Call a POISON  CENTER/doctor/if you feel unwellManufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.			

Hazard category	<u>Symbol</u>		Signal word	Hazard statement	
1	Skull and crossbones	$\Omega_{\alpha}$	Danger	H330	Fatal if inhaled
2	Skull and crossbones		Danger	H330	Fatal if inhaled

Precautionary statements				
Prevention	Response	Storage	Disposal	
P260 Do not breathe dust/fume/gas/mist/vapours/spray.  Manufacturer/supplier or the competent authority to specify applicable conditions.  P271 Use only outdoors or in a well-ventilated area.  P284 [In case of inadequate ventilation] wear respiratory protection.  — text in square brackets may be used if additional information is provided with the chemical at the point of use that explains what type of ventilation would be adequate for safe use.  Manufacturer/supplier or the competent authority to specify equipment.	P304 + P340  IF INHALED: Remove person to fresh air and keep comfortable for breathing.  P310  Immediately call a POISON  CENTER/doctor/ Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.  P320  Specific treatment is urgent (see on this label)  - if immediate administration of antidote is required.  Reference to supplemental first aid instruction.	P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  – if the chemical is volatile and may generate a hazardous atmosphere. P405 Store locked up.	P501  Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).  Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.	

Hazard category Signal word Hazard statement

Skull and crossbones

3



Danger H331

Toxic if inhaled

	Precautionary statements				
Prevention	Response	Storage	Disposal		
P261 Avoid breathing dust/fume/gas/mist/ vapours/spray.  — may be omitted if P260 is given on the label Manufacturer/supplier or the competent authority to specify applicable conditions. P271 Use only outdoors or in a well-ventilated area.	P304 + P340  IF INHALED: Remove person to fresh air and keep comfortable for breathing.  P311  Call a POISON CENTER/doctor Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.  P321  Specific treatment (see on this label)  - if immediate specific measures are required.  Reference to supplemental first aid instruction.	P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  — if the chemical is volatile and may generate a hazardous atmosphere. P405 Store locked up.	P501  Dispose of content/container to in accordance with local/regional/national/international regulations (to be specified).  Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.		

Hazard category Symbol Signal word Hazard statement

Exclamation mark

4

Warning H332

Harmful if inhaled

Precautionary statements				
Prevention	Response	Storage	Disposal	
P261 Avoid breathing dust/fume/gas/mist/ vapours/spray. — may be omitted if P260 is given on the label Manufacturer/supplier or the competent authority to specify applicable conditions. P271 Use only outdoors or in a well-ventilated area.	P304 + P340  IF INHALED: Remove person to fresh air and keep comfortable for breathing.  P312  Call a POISON CENTER/doctor/if you feel unwell. Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.			

Hazard category Symbol Signal word Hazard statement

5 Warning H333 May be harmful if inhaled

Precautionary statements				
Prevention	Response	Storage	Disposal	
	P304 + P312  IF INHALED: Call a POISON CENTER/doctor/if you feel unwellManufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.			

### SKIN CORROSION/IRRITATION (CHAPTER 3.2)

Hazard category Signal word Hazard statement

1A to 1C <u>Corrosion</u> Danger H314 Causes severe skin burns and eye damage

Precautionary statements				
Prevention	Response	Storage	Disposal	
P260 Do not breathe dusts or mists.  - if inhalable particles of dusts or mists may occur during use. P264 Washthoroughly after handling. Manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling. P280 Wear protective gloves/protective clothing/eye protection/face protection. Manufacturer/supplier or the competent authority may further specify type of equipment where appropriate.	P301 + P330 + P331  IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  P303 + P361 + P353  IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  - text in square brackets to be included where the manufacturer/supplier or the competent authority considers it appropriate for the specific chemical.  P363  Wash contaminated clothing before reuse.  P304 + P340  IF INHALED: Remove person to fresh air and keep comfortable for breathing.  P310  Immediately call a POISON CENTER/doctor/ Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.  P321  Specific treatment (see on this label)  Reference to supplemental first aid instruction.  Manufacturer/supplier or the competent authority may specify a cleansing agent if appropriate.  P305 + P351 + P338  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	P405 Store locked up.	P501  Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).  Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.	

### SKIN CORROSION/IRRITATION (CHAPTER 3.2)

Hazard category Signal word Hazard statement

2 <u>Exclamation mark</u>



Warning H315 Causes skin irritation

Precautionary statements			
Prevention	Response	Storage	Disposal
Wash thoroughly after handling Manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling.  P280  Wear protective gloves.  Manufacturer/supplier or the competent authority may further specify type of equipment where appropriate.	P302 + P352  IF ON SKIN: Wash with plenty water/Manufacturer/supplier or the competent authority may specify a cleansing agent if appropriate, or may recommend an alternative agent in exceptional cases if water is clearly inappropriate.  P321  Specific treatment (see on this label) Reference to supplemental first aid instruction. Manufacturer/supplier or the competent authority may specify a cleansing agent if appropriate.  P332 + P313  If skin irritation occurs: Get medical advice/attention.  — may be omitted when P333+P313 appears on the label Manufacturer/supplier or the competent authority to select medical advice or attention as appropriate.  P362 + P364  Take off contaminated clothing and wash it before reuse.		

### SKIN CORROSION/IRRITATION (CHAPTER 3.2)

Hazard category Symbol Signal word Hazard statement

3 <u>No symbol</u> Warning H316 Causes mild skin irritation

Precautionary statements			
Prevention	Response	Storage	Disposal
	P332 + P313 <b>If skin irritation occurs: Get medical advice/attention.</b> – may be omitted when P333+P313 appears on the label.  Manufacturer/supplier or the competent authority to select medical advice or attention as appropriate.		

### EYE DAMAGE/IRRITATION (CHAPTER 3.3)

Hazard category Symbol Signal word Hazard statement

Danger H318 Causes serious eye damage

Precautionary statements			
Prevention	Response	Storage	Disposal
P280 Wear eye protection/face protection. Manufacturer/supplier or the competent authority may further specify type of equipment where appropriate.	P305 + P351 + P338  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  P310  Immediately call a POISON CENTER/doctor/Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.		

### EYE DAMAGE/IRRITATION (CHAPTER 3.3)

Hazard category Symbol Signal word Hazard statement

2A <u>Exclamation mark</u>

Warning H319

Causes serious eye irritation

Precautionary statements			
Prevention	Response	Storage	Disposal
P264	P305 + P351 + P338		
Wash thoroughly after handling.	IF IN EYES: Rinse cautiously with water for		
Manufacturer/supplier or the competent	several minutes. Remove contact lenses, if		
authority to specify parts of the body to be	present and easy to do. Continue rinsing.		
washed after handling.			
	P337 + P313		
P280	If eye irritation persists: Get medical		
Wear eye protection/face protection.	advice/attention.		
Manufacturer/supplier or the competent	Manufacturer/supplier or the competent authority		
authority may further specify type of	to select medical advice or attention as		
equipment where appropriate.	appropriate.		

### EYE DAMAGE/IRRITATION (CHAPTER 3.3)

Hazard category Signal word Hazard statement

2A <u>Exclamation mark</u>

Warning

H319 Causes serious eye irritation

Precautionary statements			
Prevention	Response	Storage	Disposal
P264	P305 + P351 + P338		
Wash thoroughly after handling.	IF IN EYES: Rinse cautiously with water for several		
Manufacturer/supplier or the	minutes. Remove contact lenses, if present and easy		
competent authority to specify parts of	to do. Continue rinsing.		
the body to be washed after handling.			
	P337 + P313		
P280	If eye irritation persists: Get medical		
Wear eye protection/face protection.	advice/attention.		
Manufacturer/supplier or the competent	Manufacturer/supplier or the competent authority to		
authority may further specify type of	select medical advice or attention as appropriate.		
equipment where appropriate.			

## UN/SCEGHS/32/INF.3/Add.2

### EYE DAMAGE/IRRITATION (CHAPTER 3.3)

Hazard category Symbol Signal word Hazard statement

2B <u>No symbol</u> Warning H320 Causes eye irritation

Precautionary statements			
Prevention	Response	Storage	Disposal
P264 Wash thoroughly after handlingManufacturer/supplier or the competent authority to specify parts of the body to be washed after handling.	P305 + P351 + P338  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  P337 + P313  If eye irritation persists: Get medical advice/attention.  Manufacturer/supplier or the competent authority to select medical advice or attention as appropriate.		

### SENSITIZATION – RESPIRATORY (CHAPTER 3.4)

Hazard category Symbol Signal word Hazard statement

1, 1A, 1B <u>Health hazard</u>



Danger H334 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.  — may be omitted if P260 is given on the label  Manufacturer/supplier or the competent authority to specify applicable conditions.  P284 [In case of inadequate ventilation] wear respiratory protection.  — text in square brackets may be used if additional information is provided with the chemical at the point of use that explains what type of ventilation would be adequate for safe use.  Manufacturer/supplier or the competent authority to specify equipment.	P304 + P340  IF INHALED: remove person to fresh air and keep comfortable for breathing.  P342 + P311  If experiencing respiratory symptoms: Call a POISON CENTER/doctor/ Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.		P501  Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).  Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.

## SENSITIZATION – SKIN (CHAPTER 3.4)

Hazard category Signal word Hazard statement

1, 1A, 1B <u>Exclamation mark</u>

Ţ

Warning H317 May cause an allergic skin reaction

Precautionary statements			
Prevention	Response	Storage	Disposal
P261 Avoid breathing dust/fume/gas/mist/ vapours/spray.  — may be omitted if P260 is given on the label Manufacturer/supplier or the competent authority to specify applicable conditions. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves. Manufacturer/supplier or the competent authority may further specify type of equipment where appropriate.	P302 + P352  IF ON SKIN: Wash with plenty of water/Manufacturer/supplier or the competent authority may specify a cleansing agent if appropriate, or may recommend an alternative agent in exceptional cases if water is clearly inappropriate.  P333 + P313  If skin irritation or rash occurs: Get medical advice/attention.  Manufacturer/supplier or the competent authority to select medical advice or attention as appropriate.  P321  Specific treatment (see on this label) Reference to supplemental first aid instruction.  Manufacturer/supplier or the competent authority may specify a cleansing agent if appropriate.  P362 + P364  Take off contaminated clothing and wash it before reuse.		Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.

### GERM CELL MUTAGENICITY (CHAPTER 3.5)

Hazard category	<u>Symbol</u>	Signal word	Hazard	d statement
1	Health hazard	Danger	H340	May cause genetic defects <>
2	Health hazard	Warning	H341	Suspected of causing genetic defects <>
	<u>Team nagara</u>			(state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

Precautionary statements				
Prevention	Response	Storage	Disposal	
P201 Obtain special instructions before use omit for consumer products where P202 is used.  P202 Do not handle until all safety precautions have been read and understood.  P280 Wear protective gloves/protective clothing/eye protection/face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.	P308 + P313  IF exposed or concerned: Get medical advice/attention.  Manufacturer/supplier or the competent authority to select medical advice or attention as appropriate.	P405 Store locked up.	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.	

# UN/SCEGHS/32/INF.3/Add.2

### CARCINOGENICITY (CHAPTER 3.6)

Hazard category	<u>Symbol</u>
1	<u>Health hazard</u>
2	Health hazard



Danger H350 May cause cancer <...>
Warning H351 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		
P201 Obtain special instructions before use omit for consumer products where P202 is used. P202 Do not handle until all safety precautions have been read and understood. P280 Wear protective gloves/protective clothing/eye protection/face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.	P308 + P313  IF exposed or concerned: Get medical advice/attention.  Manufacturer/supplier or the competent authority to select medical advice or attention as appropriate.	P405 Store locked up.	P501  Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).  Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.		

## REPRODUCTIVE TOXICITY (CHAPTER 3.7)

Hazard category	<u>Symbol</u>	Signal word	d Hazard statement		
1	<u>Health hazard</u>	Danger	H360	May damage fertility or the unborn child <> <<>>	
2	Health hazard	Warning	H361	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		
P201 Obtain special instructions before use omit for consumer products where P202 is used.  P202 Do not handle until all safety precautions have been read and understood.  P280 Wear protective gloves/protective clothing/eye protection/face protection. Manufacturer/supplier or the competent authority to specify the appropriate type of equipment.	P308 + P313  IF exposed or concerned: Get medical advice/attention.  Manufacturer/supplier or the competent authority to select medical advice or attention as appropriate.	P405 Store locked up.	Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.		

## UN/SCEGHS/32/INF.3/Add.2

### REPRODUCTIVE TOXICITY (CHAPTER 3.7)

### (effects on or via lactation)

Hazard category	<u>Symbol</u>	Signal word	Hazard statement	
(additional)	No symbol	No signal word	H362	May cause harm to breast-fed children

(uaumona)	<u>140 symbol</u> 140 signai wora	11302 Way C	ause narm to breast-red emidren			
Precautionary statements						
Prevention	Response	Storage	Disposal			
P201	P308 + P313					
Obtain special instructions before use.	IF exposed or concerned: Get medical					
- omit for consumer products where P202	advice/attention.					
<u>is used.</u>	Manufacturer/supplier or the competent authority to					
<u>P202</u>	select medical advice or attention as appropriate.					
Do not handle until all safety						
precautions have been read and						
<u>understood.</u>						
P260						
Do not breathe dusts or mists.						
- if inhalable particles of dusts or mists						
may occur during use.						
P263						
Avoid contact during pregnancy and while nursing.						
e e e e e e e e e e e e e e e e e e e						
P264						
Wash thoroughly after handling. Manufacturer/supplier or the						
competent authority to specify parts of						
the body to be washed after handling.						
P270						
Do not eat, drink or smoke when using						
this product.						

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

Hazard category <u>Symbol</u> Signal word Hazard statement

<u>Health hazard</u>



Danger H370 Causes damage to organs <...> <<...>

</...>

(or state all organs affected if known)

<<...> (state route of exposure if it is conclusively)

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

Precautionary statements					
Prevention	Response	Storage	Disposal		
P260 Do not breathe dust/fume/gas/mist/ vapours/spray.  Manufacturer/supplier or the competent authority to specify applicable conditions.  P264 Washthoroughly after handling Manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling.  P270 Do not eat, drink or smoke when using this product.	P308 + P311  IF exposed or concerned: Call a POISON  CENTER/doctor/Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.  P321  Specific treatment (see on this label)  — if immediate measures are required Reference to supplemental first aid instruction.	P405 Store locked up.	P501  Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).  Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.		

## UN/SCEGHS/32/INF.3/Add.2

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

Hazard category <u>Symbol</u> Signal word Hazard statement

2 <u>Health hazard</u>



Warning	H371	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	
P260 Do not breathe dust/fume/gas/mist/ vapours/spray. Manufacturer/supplier or the competent authority to specify applicable conditions. P264 Wash thoroughly after handlingManufacturer/supplier or the competent authority to specify parts of the body to be washed after handling. P270 Do not eat, drink or smoke when using this product.	P308 + P311  IF exposed or concerned: Call a POISON  CENTER/doctor/ Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.	P405 Store locked up.	P501  Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).  Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.	

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

Hazard category	<u>Symbol</u>	Signal word	Hazard	statement
3	Exclamation mark	Warning	H335	May cause respiratory irritation; or
		<i>6</i>	H336	May cause drowsiness or dizziness

	Precautionary statements		
Prevention	Response	Storage	Disposal
P261 Avoid breathing dust/fume/gas/mist/ vapours/spray.  — may be omitted if P260 is given on the label.  Manufacturer/supplier or the competent authority to specify applicable conditions.  P271 Use only outdoors or in a well-	P304 + P340  IF INHALED: Remove person to fresh air and keep comfortable for breathing.  P312  Call a POISON CENTER/doctor/if you feel unwellManufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.	P403 + P233 Store in a well- ventilated place. Keep container tightly closed.  – if the chemical is volatile and may generate a hazardous atmosphere. P405 Store locked up.	P501  Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).  Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.

### SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (**CHAPTER 3.9**)

Hazard category	<u>Symbol</u>	Signal word	Hazard statement
-----------------	---------------	-------------	------------------

Health hazard



H372 Causes damage to organs <...> through prolonged or repeated exposure Danger

<<...>>

(state all organs affected, if known) <...>

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

of exposure	cause	the	hazard)	

of empositive entire international							
	Precautionary statements						
Prevention	Response	Storage	Disposal				
P260 Do not breathe dust/fume/gas/mist/ vapours/spray.  Manufacturer/supplier or the competent authority to specify applicable conditions.  P264 Wash thoroughly after handlingManufacturer/supplier or the competent authority to specify parts of the body to be washed after handling.	P314 Get medical advice/attention if you feel unwell. Manufacturer/supplier or the competent authority to select medical advice or attention as appropriate.		P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.				
P270  Do not eat, drink or smoke when using this product.							

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

Hazard category Symbol Signal word Hazard statement

2 <u>Health hazard</u>



Warning H373 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			
P260 Do not breathe dust/fume/gas/mist/vapours/spray. Manufacturer/supplier or the competent authority to specify applicable conditions.	P314 Get medical advice/attention if you feel unwell. Manufacturer/supplier or the competent authority to select medical advice or attention as appropriate.		P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.			

### ASPIRATION HAZARD (CHAPTER 3.10)

Hazard category Symbol Signal word Hazard statement

Health hazard Danger H304 May be fatal if swallowed and enters airways

2 Health hazard Warning H305 May be harmful if swallowed and enters airways

Precautionary statements						
Prevention	Response	Storage	Disposal			
	P301 + P310  IF SWALLOWED: Immediately call a POISON CENTER/ doctor/Manufacturer/supplier or the competent authority to specify the appropriate source of emergency medical advice.  P331 Do NOT induce vomiting.	P405 Store locked up.	P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.			

### HAZARDOUS TO THE AQUATIC ENVIRONMENT – SHORT-TERM (ACUTE) HAZARD (CHAPTER 4.1)

Hazard category Signal word Hazard statement

Environment Warning H400 Very toxic to aquatic life

Precautionary statements					
Prevention	Response	Storage	Disposal		
P273 Avoid release to the environment.  – if this is not the intended use.	P391 Collect spillage.		P501  Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified).  Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.		

## HAZARDOUS TO THE AQUATIC ENVIRONMENT – SHORT-TERM (ACUTE) HAZARD (CHAPTER 4.1)

Hazard category	<u>Symbol</u>	Signal word	Hazaro	d statement
2	<u>No symbol</u>	No signal word	H401	Toxic to aquatic life
3	No symbol	No signal word	H402	Harmful to aquatic life

Precautionary statements					
Prevention	Response	Storage	Disposal		
P273 Avoid release to the environment.  – if this is not the intended use.			P501  Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.		

### HAZARDOUS TO THE AQUATIC ENVIRONMENT – LONG-TERM (CHRONIC) HAZARD (CHAPTER 4.1)

Hazard category	Sy	<u>mbol</u>	Signal word	Hazard	l statement
1	<u>Environment</u>	*	Warning	H410	Very toxic to aquatic life with long lasting effects
2.	Environment		No signal word	H411	Toxic to aquatic life with long lasting effects

	Precautionary statements					
Prevention	Response	Storage	Disposal			
P273 Avoid release to the environment.  – if this is not the intended use.	P391 Collect spillage.		P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.			

# UN/SCEGHS/32/INF.3/Add.2

### HAZARDOUS TO THE AQUATIC ENVIRONMENT – LONG-TERM (CHRONIC) HAZARD (CHAPTER 4.1)

Hazard category	<u>Symbol</u>	Signal word	Hazar	d statement
3	<u>No symbol</u>	No signal word	H412	Harmful to aquatic life with long lasting effects
4	<u>No symbol</u>	No signal word	H413	May cause long lasting harmful effects to aquatic life

Precautionary statements					
Prevention	Response	Storage	Disposal		
P273 Avoid release to the environment.  – if this is not the intended use.			P501 Dispose of contents/container to in accordance with local/regional/national/international regulations (to be specified). Manufacturer/supplier or the competent authority to specify whether disposal requirements apply to contents, container or both.		

### HAZARDOUS TO THE OZONE LAYER (CHAPTER 4.2)

Hazard category	<u>Symbol</u>	Signal word	Hazard	statement
1	Exclamation mark	Warning	H420	Harms public health and the environment by destroying ozone in the upper atmosphere

Precautionary statements					
Prevention	Response	Storage	Disposal		
			P502 Refer to manufacturer or supplier for information on recovery or recycling		