

National Standard of the People's Republic of China

GB15258-XXXX Replaces GB_15258-1999

General rules for preparation of precautionary labels for chemicals

Draft for approval

Issue Date: XXXX – XX — Implementation Date: XXXX – XX — XX

Issued by: General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China and

Standardisation Administration of the People's Republic of China (SAC)

Foreword

Articles 4.1, 4.2, 4.3, 5.1, 5.2, and Sections 5.4.1 and 5.4.2 of this Standard are mandatory, whilst the rest are recommended.

The conformity degree between this Standard and its corresponding regulation, the second revised edition of "Globally Harmonised System of Classification and Labelling of Chemicals" (GHS), is non-equivalent.

This Standard replaces GB 15258-1999.

The main differences between this Standard when compared to GB 15258-1999 are:

- the label contents in Article 4.2 have been modified;
- "Label dimensions" has been added to Article 5.3;
- "Simplified labels" has been added to Article 4.3;
- Appendices A, B, C have been modified to include designed examples of precautionary labels, and pasting examples of precautionary labels and transport symbols, and precautionary statements have been provided for different categories of chemicals.

Appendices A, B, and C to this Standard are informative annexes.

The implementation date of this Standard is XX date, XX month of 200X year; its transition period for implementation from the implementation date shall be one year.

This Standard is proposed by and is under the jurisdiction of the Dangerous Chemicals Management of Standardisation Administration of China (SAC/TC251).

The organisation responsible for drafting this Standard:

National Chemical Registration Centre of State Bureau of Safe Production Supervision and Administration

The organisations that participated in the drafting of this Standard:

SINOPEC Safety Engineering Institute:

State Key Laboratory of Chemical Safety and Control.

The main drafters of this Standard:

Ji Guofeng, Li Yuncai, Guo Xiuyun, Li Yongxing, Li Xuehua, Chen Jun, Pen Xiangwei, Cao Yongyou, Zhang Haifeng.

This Standard replaces the previously issued Standards:

GB/T 15258-94; GB15258-1999.

General rules for preparation of precautionary label for chemicals

1 Scope

This Standard specifies the relevant definitions, content, preparation requirements and application methods of precautionary labels for chemicals.

This Standard applies to the compiling, preparation and application of precautionary labels for chemicals.

Where the precautionary label of a product is specified by a special standard, i.e. for pesticides, gas cylinders, etc., these shall be conducted in accordance with said special standard.

2 Normative References

The provisions of the following documents become provisions of this Standard after being referenced. For dated reference documents, all later amendments (excluding corrigenda) and versions do not apply to this Standard; however, the parties to the agreement are encouraged to study whether the latest versions of these documents are applicable. For undated reference documents, the latest versions apply to this Standard.

GB/T 12268 List of dangerous goods

GB 20576 Safety rules for classification, precautionary labelling and precautionary statements of chemicals – Explosives

GB 20577 Safety rules for classification, precautionary labelling and precautionary statements of chemicals – Flammable gases

GB 20578 Safety rules for classification, precautionary labelling and precautionary statements of chemicals – Flammable aerosols

GB 20579 Safety rules for classification, precautionary labelling and precautionary statements of chemicals – Oxidising gases

GB20580 Safety rules for classification, precautionary labelling and precautionary statements of chemicals – Gases under pressure

GB 20581 Safety rules for classification, precautionary labelling and precautionary statements of chemicals – Flammable liquids

GB 20582 Safety rules for classification, precautionary labelling and precautionary statements of chemicals – Flammable solids

GB 20583 Safety rules for classification, precautionary labelling and precautionary statements of chemicals – Self-reactive substances

GB 20584 Safety rules for classification, precautionary labelling and precautionary statements of chemicals – Self-heating substances

GB20585 Safety rules for classification, precautionary labelling and precautionary statements of chemicals – Pyrophoric liquids

GB20586 Safety rules for classification, precautionary labelling and precautionary statements of chemicals - Pyrophoric solids

GB20587 Safety rules for classification, precautionary labelling and precautionary statements of chemicals – Substances which, in contact with water, emit flammable gases

GB20588 Safety rules for classification, precautionary labelling and precautionary statements of chemicals – Corrosive to metals

GB20589 Safety rules for classification, precautionary labelling and precautionary statements of chemicals – Oxidising liquids

GB20590 Safety rules for classification, precautionary labelling and precautionary statements of chemicals – Oxidising solids

GB20591 Safety rules for classification, precautionary labelling and precautionary statements of chemicals – Organic peroxides

GB20592 Safety rules for classification, precautionary labelling and precautionary statements of chemicals – Acute toxicity

GB20593 Safety rules for classification, precautionary labelling and precautionary statements of chemicals – Skin corrosion/irritation

GB20594 Safety rules for classification, precautionary labelling and precautionary statements of chemicals – Serious eye damage/ eye irritation

GB20595 Safety rules for classification, precautionary labelling and precautionary statements of chemicals - Respiratory or skin sensitisation

GB20596 Safety rules for classification, precautionary labelling and precautionary statements of chemicals – Germ cell mutagenicity

GB20597 Safety rules for classification, precautionary labelling and precautionary statements of chemicals - Carcinogenicity

GB20598 Safety rules for classification, precautionary labelling and precautionary statements of chemicals – Reproductive toxicity

GB20599 Safety rules for classification, precautionary labelling and precautionary statements of chemicals – Specific target organ systemic toxicity – Single exposure

GB20601 Safety rules for classification, precautionary labelling and precautionary statements of chemicals – Specific target organ systemic toxicity – Repeated exposure

GB20602 Safety rules for classification, precautionary labelling and precautionary statements of

chemicals – Hazardous to the aquatic environment

UN Recommendations on the Transport of Dangerous Goods, Model Regulations

3 Terms and definitions

The terms and definitions listed below apply to this Standard.

3.1 Label

Label means a group of written text, pictograms and codes indicating the hazardous nature of and safety precautions for a chemical substance, which can be affixed to, printed on or attached to the container of a hazardous product, or to the outer packaging thereof.

3.2 Label element

Label element means one type of information that has been harmonised for use on a label, e.g. chemical identification, pictogram, signal word, hazard statement, precautionary statement, emergency phone number, supplier identification and reference consulting guiding words, etc.

3.3 Signal word

Signal word means a word used to indicate the relative level of severity of hazard and to alert the reader to a potential hazard on the label.

3.4 Symbol

Symbol means a graphical element intended to succinctly convey information.

3.5 Pictogram

Pictogram means a graphical composition that includes a symbol plus another graphic element, such as a border, background pattern or colour, which is intended to convey specific information.

3.6 Hazard statement

Hazard statements means a statement assigned to a hazard class or category that describes the nature of the hazards of a hazardous product, including, where appropriate, the degree of hazard.

3.7 Precautionary statement

Precautionary statement means a phrase (and/ or a pictogram) that describes recommended measures that should be taken to minimise or prevent adverse effects resulting from exposure to a hazardous product, or improper storage or handling of a hazardous product.

3.8 Physical hazard

Physical hazard means all hazardous natures such as the nature of the explosive, the flammable (highly flammable or flammable, auto-flammable, flammable when in contact with water), the self-reactive, the oxidising, the hazardous nature of gas under pressure and the hazardous nature of metal corrosive.

3.9 Health hazard

Health hazard refers to the research conducted in accordance with determined scientific methods, proved by the statistical data of the research, any adverse effects thereof (acute toxicity or chronic

toxicity) to human health which occur following oral, dermal or exposure to certain chemicals.

3.10 Environmental hazard

Environmental hazard means any hazard which is produced after the chemical has entered the environment by way of environmental storing up, gathering of organisms, organism transformation or chemical reaction.

4 Labels

4.1 Label elements

Label elements consist of chemical identification, pictograms, signal words, hazard statements, precautionary statements, emergency phone numbers, supplier identification and reference consulting guiding words, etc.

4.2 Contents

4.2.1 Chemical identification

Chemical identification is the chemical name of a substance or its common name marked clearly in Chinese and English respectively. The name marked shall be visibly eye-catching, located at the top of the label. The name shall be identical to the name listed in the Material Safety Data Sheet.

For mixtures, the chemical names or common names of the main hazardous ingredients of the chemical and the concentration or concentration ranges thereof shall be marked. Ingredients which are part of a business secret do not have to be marked, but the dangerous nature thereof shall be listed.

4.2.2 Pictogram

The pictograms specified in GB 20576 – GB 20599 and GB 20601 - GB 20602 shall be adopted.

4.2.3 Signal word

According to the hazard level and hazard category of the chemical, the two signal words "Danger" and "Warning" should be used to indicate the signalling of the hazard level. The signal word shall be located below the name of the chemical, and must be eye-catching and clear. Different signal words should be used for different types of hazardous chemicals in accordance with GB 20576 – GB 20599 and GB 20601 - GB 20602.

4.2.4 Hazard statement

Hazard statement gives a concise account of the hazard characteristics of the chemical and is located below the signal word. Choose different hazard statements for different types of hazardous chemicals in accordance with GB 20576 – GB 20599 and GB 20601 - GB 20602.

4.2.5 Precautionary statement

The precautionary statement is used to explain matters to which attention must be paid during the operation of the disposal, handling, storage and application of the chemical, and the simple but effective precaution measures that should be taken when accidents occur; the statement should be brief and to the point. The precautionary statement shall include content such as safety prevention measures, what to do in case of an accident (e.g. leak, personal exposure or fire, etc.), safety storage measures and disposal. See Appendix C for the details of precautionary statements.

4.2.6 Supplier identification

The name, address, postcode and phone number(s) etc. of the supplier.

4.2.7 Emergency phone number

Fill in the manufacturer of the chemical or the 24-hour emergency phone number(s) for chemical accidents which are entrusted by the manufacturer.

On the precautionary label of any imported chemical, there shall be at least one 24-hour emergency phone number, which is located in China, for chemical accidents.

4.2.8 Reference consulting guiding words

For guidance for chemical consumers refer to the Material Safety Data Sheet.

4.2.9 Precedence of hazard information

If a chemical has two or more hazardous natures, the precedence of the pictogram, signal word and hazard statement of the precautionary label shall be specified as below:

4.2.9.1 Precedence of the pictograms

The pictogram precedence of the physical hazard shall be determined in accordance with the primary/secondary hazard natures specified in GB 12268. For chemicals which are not listed in GB 12268, the following hazard natures of the hazard categories shall always be the primary hazards: explosives, flammable gases, flammable aerosols, oxidising gases, gases under pressure, self-reactive substances and mixtures, combustible substances and organic peroxides. The determination of other primary hazards shall be conducted in accordance with the precedence determination methods of the hazardous natures specified in the "UN Recommendations on the Transport of Dangerous Goods, Model Regulations".

Health hazards shall be in accordance with the following precedence: if the skull or crossbones applies, the exclamation mark should not appear; if the corrosive symbol applies, the exclamation mark should not appear where it is used for skin or eye irritation; if the health hazard symbol appears for respiratory sensitisation, the exclamation mark should not appear where it is used for skin sensitisation or for skin or eye irritation.

4.2.9.2 Precedence of the signal words

When multiple hazards exist, if the signal word "Danger" is selected, then the signal word "Warning" should not appear.

4.2.9.3 Precedence of the hazard statement

All hazard statements shall appear on the precautionary label and shall be listed in order of physical hazards, health hazards and environment hazards.

4.3 Simplified label

For chemical packages of 100ml or less, for the convenience of the application of the label the elements of the precautionary label can be simplified and shall contain only the chemical identification, pictogram, signal word, hazard statement, emergency phone number, supplier's name and contact phone number, and reference consulting guiding words.

4.4 Precautionary label examples

See Appendix A for examples of the precautionary label.

5 Preparation

5.1 Compiling

The explanatory text of the label shall use simple, direct, clear and easy to understand normative written Chinese. Written languages of national minorities or foreign languages may also be used, but the meaning stated shall correspond to the meaning indicated in the written Chinese text, and the font size shall be smaller than the Chinese font. Text of the same meaning shall be represented by the same language or pictogram

If new information is discovered concerning a certain chemical, its label shall be revised promptly.

5.2 Colour

The colours of the pictogram on the label shall be determined in accordance with the provisions specified in GB 20576 – GB 20599 and GB 20601 – GB 20602; this is usually a black symbol on a white background with a red square border. The colour of the text shall be a colour which is in clear contrast to the background, usually black-white. If it is for domestic use, then the colour of the square border can be black.

5.3 Label dimensions

For containers and packages with different capacities, the minimum dimensions of the labels are shown as in the following table:

Capacity of container or packaging L	Label dimensions mm x mm
• 0.1	Use simplified label
> 0.1 ~ • 3	50 x 75
> 3 ~ • 50	75 x 100
> 50 ~ • 1000	100 x 150
> 500 ~ • 1000	150 x 200
> 1000	200 x 300

5.4 Printing

- **5.4.1** There shall be a black border added along the edge of the label, there shall be a space which is equal to or greater than 3mm remaining outside of the border, and the width of the border shall be equal or greater than 1mm.
- **5.4.2** The pictogram must be seen even from a distance, or even under mist conditions or parts of the container are not clear.
- **5.4.3** The printing of the label shall be clear, and the printing and adhesive materials used shall be durable and waterproof.

6 Applications

6.1 Application methods

- **6.1.1** The precautionary label shall be affixed to, attached to, or printed onto the chemical packaging or clearly placed elsewhere on the container.
- **6.1.2** When used together with the transport symbol, the transport symbol can be located next to the precautionary label, separate from all other information. The transport symbol can also be placed in a position close to the precautionary label on the packaging, under the latter and, if the pictogram of the precautionary label and the transport symbol are repeated with one another, then the pictogram in the precautionary label shall be deleted.
- **6.1.3** For composite packages, the inner packaging must have a precautionary label and the outer packaging must have a transport pictogram; if the transport symbol is not required then the precautionary label can be added. See Appendix B.

6.2 Location

The affixing and printing positions of the precautionary labels are specified as below:

- a) drum, bottle shaped packages: located at sides of the drum, bottle;
- b) box-shaped packages: located at the ends of the packages or sides where they are clearly visible;
- c) bag, bundle packages: located at the clear visible places of the packages.

6.3 Matters requiring attention when applying labels

- **6.3.1** The affixing, attaching or printing of the precautionary label shall be firm and shall be guaranteed not to fall off or be damaged during transportation or storage.
- **6.3.2** The precautionary label shall be affixed, attached or printed by the production enterprise before the goods leave the factory. If the packaging must be changed, then the unit which is responsible for changing the packaging shall affix, attach or print the labels again.
- **6.3.3** If packages or containers containing dangerous chemicals are treated and approved as being free from any hazardous nature, then the precautionary label can be taken removed; otherwise, any corresponding labels shall not be removed.

Appendix A

(Informative Annex)

Example of precautionary label for chemical

A.1 Example of precautionary label

Chemical Name

Ingredient A. 40%; Ingredient B. 60%

DANGER







Highly flammable liquid and vapour, fatal if swallowed, major toxicity to aquatic organisms [Prevention measures]

- a) Keep away from heat/spark/open flame/hot surface, use only non-sparking tools;
- b) Keep container tightly closed;
- c) Use electrostatic prevention measures, ground/bond container and receiving equipment;
- d) Use explosion-proof electrical/ventilating /lighting and other equipment;
- e) Wear protective glooves/eye protection/face protection;
- f) Wash contacted body parts thoroughly after handling;
- g) Do not eat, drink or smoke at the workplace;
- h) Aviod release into the environent;

[Accident response]

- a) If on skin (or hair): immediatly remove (take off) all contaminated clothing. Rinse skin with water/shower;
- b) If swallowed, induce vomiting, get immediate medical advice/attention-
- c) Collect spillage;
- d) In case of fire, use dry chemical, foam, or carbon-dioxide for extinction.

[Safety storage]

- a) Store in well-ventilated place. Keep cool;
- b) Store locked up.

[Discard disposal]

a) Dispose of contents/containers by incineration.

Please refer to the N	Material Safety Data Sheet
Supplier: ************************************	Phone number:
Address:	Post code:

Emergency phone number for chemical accidents: XXXXXX

A.2 Example of simplified label

Chemical Name

DANGER







Highly flammable liquid and vapour, fatal if swallowed, major toxicity to aquatic organisms

Please refer to the Material Safety Data Sheet
Supplier.***** Phone number.****

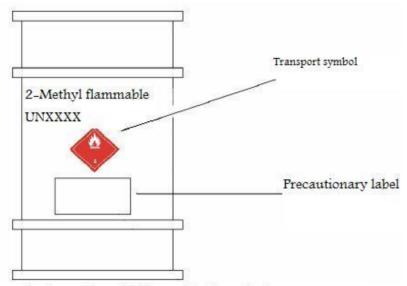
Emergency phone number for chemical accidents: XXXXXX

Appendix B

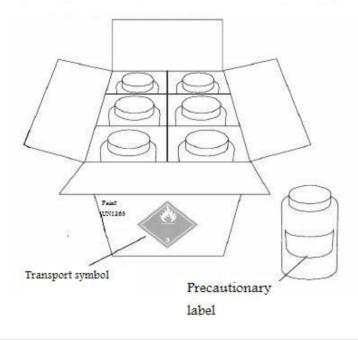
(Informative Annex)

Pasting Example of Precautionary Label and Transport Symbol for Chemical

B.1 Pasting example of precautionary label for single packaging



B.2 Pasting example of precautionary label for combination packaging



Appendix C

(Informative Annex)

Precautionary Label Statements for Chemicals

C.1 This precautionary statement can be combined or adjusted in accordance with the actual circumstances under which the chemicals are applied. The wording in the table is the core part; the 'note' is used to explain the content of the statements according to situations, so as to determine the application of the statements on the precautionary labels

Explosive	Hazard Precautionary Statements Category				
	Unstable	Prevention measures	Accident response	Safety storage	Disposal
	explosive	 Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. 	 Explosion risks in case of fire. Do not fight fire when fire reaches explosives Evacuate area 	Store Note: fill in in accordance with local/ regional/ national/ international regulations (rules).	Dispose of contents/ containers tofill in in accordance with local/ regional/ national/ international regulations (rules)
	Division 1.1 Division 1.2 Division 1.3	Keep away from heat/ sparks/ open flames/ hot surfacesNo smoking. Note: Manufacturer/supplier or the competent authority to specify applicable ignition source(s). Keep wetted with Note:Manufacturer/supplier or the competent authority to specify appropriate material. If drying out increases the explosion hazard, except as needed for manufacturing or operating processes (e.g. nitrocellulose). Container and ground/receiving equipment Note: if the explosive is electrostatically sensitive	 In case of fire: evacuate area. Explosion risk in case of fire. Do not fight fire when fire reaches explosives. 	Store Note: fill in in accordance with local/ regional/ national/ international regulations (rules).	Dispose of contents/ containers tofill in in accordance with local/ regional/ national/ international regulations (rules)

	 Do not subject to grinding/shock/friction. Note: manufacturer/supplier or competent authority to specify applicable rough handling. Wear face protection Note: manufacturer/supplier or competent authority to specify type of protective equipment. 			
Division 1.4	Keep away from heat/ sparks/ open flames/ hot surfacesNo smoking. Note: Manufacturer/supplier or the competent authority to specify applicable ignition source(s). Container and ground/receiving equipment Note: if the explosive is electrostatically sensitive Do not subject to grinding/shock/friction. Note: manufacturer/supplier or competent authority to specify applicable rough handling. Wear face protection Note: manufacturer/supplier or competent authority to specify type of protective equipment.	 In case of fire: evacuate area. Explosion risk in case of fire. Note: except if explosives are 1.4S AMMUNITION AND COMPONENTS THEREOF. Do not fight fire when fire reaches explosives. Fight fire with normal precautions from a reasonable distance. Note: If explosives are 1.4S AMMUNITION AND COMPONENTS THEREOF. 	Store Note: fill in in accordance with local/ regional/ national/ international regulations (rules).	Dispose of contents/ containers tofill in in accordance with local/ regional/ national/ international regulations (rules)
Division 1.5	 Keep away from heat/ sparks/ open flames/ hot surfacesNo smoking. Note: Manufacturer/supplier or the competent authority to specify applicable ignition source(s). Keep wetted with 	 In case of fire: evacuate area. Explosion risk in case of fire. Do not fight fire when fire reaches explosives. 	Store Note: fill in in accordance with local/ regional/ national/ international regulations (rules).	Dispose of contents/ containers tofill in in accordance with local/ regional/ national/ international regulations (rules)

		Note:Manufacturer/supplier or the competent authority to specify appropriate material. If drying out increases the explosion hazard, except as needed for manufacturing or operating processes (e.g. nitrocellulose). • Container and ground/receiving equipment Note: if the explosive is electrostatically sensitive • Do not subject to grinding/shock/friction. Note: manufacturer/supplier or competent authority to specify applicable rough handling. • Wear face protection Note: manufacturer/supplier or competent authority to specify type of protective equipment.			
Flammable gases	1	Keep away from heat/ sparks/ open flames/ hot surfacesNo smoking. Note: Manufacturer/supplier or the competent authority to specify applicable ignition source(s).	Leaking gas fire: do not extinguish unless leak can be stopped safely. Eliminate all ignition sources if safe to do so.	Store in a well-ventilated place.	
	2	Keep away from heat/ sparks/ open flames/ hot surfacesNo smoking. Note: Manufacturer/supplier or the competent authority to specify applicable ignition source(s).	Leaking gas fire: do not extinguish, unless leak can be stopped safely. Eliminate all ignition sources if safe to do so.	Store in a well-ventilated place.	
Flammable aerosols	1 2	Keep away from heat/ sparks/ open flames/ hot surfacesNo smoking. Note: Manufacturer/supplier or the competent authority to specify applicable ignition source(s).		Protect from sunlight. Do not expose to temperatures exceeding 50°C.	

		 Do not spray on an open flame or other ignition source. Pressurised container: do not pierce or burn, even after use. 			
Oxidising gases	1	Keep/store away from clothing//combustible materials. Note:Manufacturer/supplier or the competent authority to specify other incompatible materials. Keep reduction valves free from grease and oil	In case of fire: stop leak if safe to do so.	Store in a well-ventilated place.	
Gases under pressure	Compressed gas Liquefied gas Dissolved gas			Protect from sunlight. Store in a well-ventilated place.	
	Refrigerated liquefied gas	Wear cold insulating gloves/face shield/eye protection	 Thaw frosted parts with lukewarm water. Do not rub affected area. Get immediate medical advice/attention 	Store in a well-ventilated place.	
Flammable liquid	1 2 3	 Keep away from heat/ sparks/ open flames/ hot surfacesNo smoking. Note: Manufacturer/supplier or the competent authority to specify applicable ignition source(s). Keep container tightly closed. Ground/bond container and receiving equipment 	If ON SKIN (or hair): remove/take off all contaminated clothing immediately. Rinsing skin with water/shower. In case of fire: usefor extinction. Note:manufacturer/supplier or the competent authority to specify appropriate fire-extinguishing	Store in a well-ventilated place. Keep cool.	Dispose of contents/ containers tofill in in accordance with local/ regional/ national/ international regulations (rules)

		note: if electrostatically sensitive material is for reloading; if product is volatile so as to generate hazardous atmosphere. • Use explosion-proof electrical/ventilating/lightin g//equipment. Note: manufacturer/supplier or the competent authority to specify other equipment. • Use only non-sparking tools. • Take precautionary measures against static discharge. • Wear protective gloves/ eye protection/ face protection. Note: manufacturer/supplier or the competent authority to specify type of protective equipment.	agent.	If water increases risk.		
	4	Keep away from open flames/ hot surfacesNo smoking. Wear protective gloves/ eye protection/ face protection. Note: manufacturer/supplier or the competent authority to specify type of protective equipment.	the con	In case of fire: usefor extinctionmanufacturer/supplier or neetent authority to specify riate fire-extinguishing If water increases risk.	Store in a well-ventilated place. Keep cool.	Dispose of contents/ containers tofill in in accordance with local/ regional/ national/ international regulations (rules)
Flammable solids	1 2	Keep away from heat/ sparks/ open flames/ hot surfacesNo smoking. Note: Manufacturer/supplier or the competent authority to specify applicable ignition source(s). Ground/bond container and receiving equipment note: if electrostatically sensitive material is for reloading;	the con	In case of fire: usefor extinctionmanufacturer/supplier or neetent authority to specify riate fire-extinguishing If water increases risk.		

		Use explosion-proof electrical/ventilating/lightin g//equipment. Note: manufacturer/supplier or the competent authority to specify other equipment. If dust clouds can occur; Wear protective gloves/ eye protection/ face protection. Note: manufacturer/supplier or the competent authority to specify type of protective equipment.			
Self-reactive substances and mixtures	Type A	Keep away from heat/ sparks/ open flames/ hot surfacesNo smoking. Note: Manufacturer/supplier or the competent authority to specify applicable ignition source(s). Keep/store away from clothing//combustible materials. Note:Manufacturer/supplier or the competent authority to specify other incompatible materials. Keep only in original container. Wear protective gloves/ eye protection/ face protection. Note: manufacturer/supplier or the competent authority to specify type of protective equipment.	In case of fire: usefor extinction. Note:manufacturer/supplier or the competent authority to specify appropriate fire-extinguishing agent. Note: If water increases risk. In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.	Store in a well-ventilated place. Keep cool. Store temperature not exceeding° C. Note: manufacturer/supplier or the competent authority to specify temperature. Store away from other materials.	Dispose of contents/ containers tofill in in accordance with local/ regional/ national/ international regulations(rules)
	Туре В	 Keep away from heat/ sparks/ open flames/ hot surfacesNo smoking. Note: Manufacturer/supplier or the competent authority to specify applicable ignition source(s). Keep/store away from 	• In case of fire: usefor extinction. Note:manufacturer/supplier or the competent authority to specify appropriate fire-extinguishing agent. Note: If water increases risk.	Store in a well-ventilated place. Keep cool. Store temperature not exceeding° C. Note: manufacturer/supplier or the competent authority to	Dispose of contents/ containers tofill in in accordance with local/ regional/ national/ international regulations (rules)

		clothing//combustible materials. Note:Manufacturer/supplier or the competent authority to specify other incompatible materials. • Keep only in original container. • Wear protective gloves/ eye protection/ face protection. Note: manufacturer/supplier or the competent authority to specify type of protective equipment.	In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.	specify temperature. • Store away from other materials.	
	Type C Type D Type E Type F	Keep away from heat/ sparks/ open flames/ hot surfacesNo smoking. Note: Manufacturer/supplier or the competent authority to specify applicable ignition source(s). Keep/store away from clothing//combustible materials. Note:Manufacturer/supplier or the competent authority to specify other incompatible materials. Keep only in original container. Wear protective gloves/ eye protection/ face protection. Note: manufacturer/supplier or the competent authority to specify type of protective equipment.	In case of fire: usefor extinction. Note:manufacturer/supplier or the competent authority to specify appropriate fire-extinguishing agent. Note: If water increases risk.	Store in a well-ventilated place. Keep cool. Store temperature not exceeding° C. Note: manufacturer/supplier or the competent authority to specify temperature. Store away from other materials.	Dispose of contents/ containers tofill in in accordance with local/ regional/ national/ international regulations (rules)
Pyrophoric liquids	1	 Keep away from heat/ sparks/ open flames/ hot surfacesNo smoking. Note: Manufacturer/supplier or the competent authority to specify applicable ignition source(s). Do not allow contact with 	IF ON SKIN: Immerse in cool water/wrap with wet bandages. In case of fire: usefor extinction. Note:manufacturer/supplier or the competent authority to specify	Store contents undermanufacturer /supplier or the competent authority to specify appropriate liquid or inert gas.	

		air. • Wear protective gloves/ eye protection/ face protection. Note: manufacturer/supplier or the competent authority to specify type of protective equipment.	appropriate fire-extinguishing agent. Note: If water increases risk.		
Pyrophoric solids	1	Keep away from heat/ sparks/ open flames/ hot surfacesNo smoking. Note: Manufacturer/supplier or the competent authority to specify applicable ignition source(s). Do not allow contact with air. Wear protective gloves/ eye protection/ face protection. Note: manufacturer/supplier or the competent authority to specify type of protective equipment.	Brush off loose particles from skin, immersing contacted parts in cool water/wrap in wet bandages. In case of fire: usefor extinction. Note:manufacturer/supplier or the competent authority to specify appropriate fire-extinguishing agent. Note: If water increases risk.	Store contents undermanufacturer /supplier or the competent authority to specify appropriate liquid or inert gas.	
Self-heating substances and mixtures	1 2	Keep cool, protect from sunlight. Note: manufacturer/supplier or the competent authority to specify type of protective equipment.		Maintain air gap between stacks/pallets. Store bulk masses greater thankg/1bs at temperatures not exceeding° C. Note: manufacturer/supplier or the competent authority to specify mass and temperature. Store away from other materials.	
Substances and mixtures which, when in contact with water, emit flammable gases	1 2	 Keep away from any possible contact with water, because of violent reaction and possible flash fire. Handle under inert gas. Protect from moisture. Wear protective gloves/ eye 	 Brush off loose particles from skin, immersing contacted parts in cool water/wrap in wet bandages. In case of fire: usefor extinction. 	Store in a dry place. Store in a closed container.	Dispose of contents/ containers tofill in in accordance with local/ regional/ national/ international regulations (rules)

		protection/ face protection. Note: manufacturer/supplier or the competent authority to specify type of protective equipment.	Note:manufacturer/supplier or the competent authority to specify appropriate fire-extinguishing agent. If water increases risk.		
	3	 Handle under inert gas. Protect from moisture. Wear protective gloves/ eye protection/ face protection. Note: manufacturer/supplier or the competent authority to specify type of protective equipment. 	In case of fire: usefor extinction. Note:manufacturer/supplier or the competent authority to specify appropriate fire-extinguishing agent. If water increases risk.	Store in a dry place. Store in a closed container.	Dispose of contents/ containers tofill in in accordance with local/ regional/ national/ international regulations (rules)
Oxidising liquid	1	Keep away from heat. Keep/store away from clothing and other combustible materials. Take any precautions to avoid mixing with combustibles/ note:manufacturer/supplier or the competent authority to specify other incompatible materials. Wear protective gloves/ eye protection/ face protection. Note: manufacturer/supplier or the competent authority to specify type of protective equipment. Wear fire/flame resistant/retardant clothing.	IF ON CLOTHING: Rinse contaminated clothing and skin immediately with plenty water before removing clothes. In case of major fire and large quantities: evacuate area. Fight fire remotely due to the risk of explosion. In case of fire: usefor extinction. Note:manufacturer/supplier or the competent authority to specify appropriate fire-extinguishing agent. If water increases risk.		Dispose of contents/ containers tofill in in accordance with local/ regional/ national/ international regulations (rules)
	2 3	Keep away from heat. Keep/store away from clothing and other combustible materials. Note: manufacturer/supplier or the competent authority to specify other incompatible materials.	In case of fire: usefor extinction. Note:manufacturer/supplier or the competent authority to specify appropriate fire-extinguishing agent.		Dispose of contents/ containers to note:fill in in accordance with local/ regional/ national/ international regulations (rules)

	Take any precautions to avoid mixing with combustibles/ note:manufacturer/supplier or the competent authority to specify other incompatible materials. Wear protective gloves/ eye protection/ face protection. Note: manufacturer/supplier or the competent authority to specify type of protective equipment. Wear fire/flame resistant/retardant clothing.	If water increases risk.	
Oxidising solids 1	Keep away from heat. Keep/store away from clothing and other combustible materials. Take any precautions to avoid mixing with combustibles/ note:manufacturer/supplier or the competent authority to specify other incompatible materials. Wear protective gloves/ eye protection/ face protection. Note: manufacturer/supplier or the competent authority to specify type of protective equipment. Wear fire/flame resistant/retardant clothing.	IF ON CLOTHING: Rinse contaminated clothing and skin immediately with plenty water before removing clothes. In case of major fire and large quantities: evacuate area. Fight fire remotely due to the risk of explosion. In case of fire: usefor extinction. Note:manufacturer/supplier or the competent authority to specify appropriate fire-extinguishing agent. If water increases risk.	Dispose of contents/ containers to note:fill in in accordance with local/ regional/ national/ international regulations (rules)
3	Keep away from heat. Keep/store away from clothing and other combustible materials. Note: manufacturer/supplier or the competent authority to specify other incompatible materials.	• In case of fire: usefor extinction. Note:manufacturer/supplier or the competent authority to specify appropriate fire-extinguishing agent. If water increases risk.	Dispose of contents/ containers to note:fill in in accordance with local/ regional/ national/ international regulations (rules)

		Take any precautions to avoid mixing with combustibles/ note:manufacturer/supplier or the competent authority to specify other incompatible materials. Wear protective gloves/ eye protection/ face protection. Note: manufacturer/supplier or the competent authority to specify type of protective equipment. Wear fire/flame resistant/retardant clothing.		
Organic peroxides	Type A	Keep away from heat/ sparks/ open flames/ hot surfacesNo smoking. Note: Manufacturer/supplier or the competent authority to specify applicable ignition source(s). Keep/store away from clothing//combustible materials. Note:Manufacturer/supplier or the competent authority to specify other incompatible materials. Keep only in original container. Wear protective gloves/ eye protection/ face protection. Note: manufacturer/supplier or the competent authority to specify type of protective equipment.	Store at a temperature not exceeding C. Keep cool. Note:Manufacturer/supplier or the competent authority to specify temperature. Protect from sunlight. Store away from other materials.	Dispose of contents/ containers to note:fill in in accordance with local/ regional/ national/ international regulations (rules)
	Type B	 Keep away from heat/ sparks/ open flames/ hot surfacesNo smoking. Keep/store away from clothing//combustible materials. 	• Store at a temperature not exceeding° C. Keep cool. Note:Manufacturer/supplier or the competent authority to specify temperature.	Dispose of contents/ containers to note:fill in in accordance with local/ regional/ national/ international regulations (rules)

		Note:Manufacturer/supplier or the competent authority to specify other incompatible materials. • Keep only in original container. • Wear protective gloves/ eye protection/ face protection. Note: manufacturer/supplier or the competent authority to specify type of protective equipment.		 Protect from sunlight. Store away from other materials. 	
	Type C Type D Type E Type F	Keep away from heat/ sparks/ open flames/ hot surfacesNo smoking. Note: Manufacturer/supplier or the competent authority to specify applicable ignition source(s). Keep/store away from clothing//combustible materials. Note:Manufacturer/supplier or the competent authority to specify other incompatible materials. Keep only in original container. Wear protective gloves/ eye protection/ face protection. Note: manufacturer/supplier or the competent authority to specify type of protective equipment.		Store at a temperature not exceeding° C. Keep cool. Note:Manufacturer/supplier or the competent authority to specify temperature. Protect from sunlight. Store away from other materials.	Dispose of contents/ containers to note:fill in in accordance with local/ regional/ national/ international regulations (rules)
Corrosive to metals	1	Keep only in original container.	Absorb spillage to prevent material damage.	Store in a corrosive- resistant/container with a resistant inner liner. Note: manufacturer/supplier or the competent authority to specify other compatible materials.	
Acute toxicity -	1	Washthoroughly after	IF SWALLOWED: call a	Store locked up.	Dispose of contents/ containers to

oral	2	handling. Note:manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling. • Do not eat, drink or smoke at the place where applying this product	POISON CENTRE or doctor/physician immediately. • Specific treatment (seeon this label) Note:Refer to supplemental first aid instruction. If immediate administration of antidote is required. • Rinse mouth		note:fill in in accordance with local/ regional/ national/ international regulations (rules)
	3	Washthoroughly after handling. Note:manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling. Do not eat, drink or smoke at the place where applying this product	IF SWALLOWED: call a POISON CENTRE or doctor/physician immediately. Specific treatment (seeon this label) Note:Refer to supplemental first aid instruction. If immediate administration of antidote is required. Rinse mouth	Store locked up.	Dispose of contents/ containers to note:fill in in accordance with local/ regional/ national/ international regulations (rules)
	4	Washthoroughly after handling. Note:manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling. Do not eat, drink or smoke at the place where applying this product	 IF SWALLOED: call a POISON CENTRE or doctor/physician if you feel unwell. Rinse mouth. 		Dispose of contents/ containers to note:fill in in accordance with local/ regional/ national/ international regulations (rules)
	5		Call a POISON CENTRE or doctor/physician if you feel unwell.		Dispose of contents/ containers to note:fill in in accordance with local/ regional/ national/ international regulations (rules)
Acute toxicity - dermal	1 2	 Do not get in eyes, on skin, or on clothing. Wash thoroughly after 	If ON SKIN: gently wash with plenty of soap and water.	Store locked up.	Dispose of contents/ containers to note:fill in in accordance with local/ regional/ national/ international

	handling. Note:manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling. • Do not eat, drink or smoke in the place in which this product is applied. • Wear protective gloves/protective clothing. Note: manufacturer/supplier or the competent authority to specify type of protective equipment.	Call a POISON CENTRE or doctor/physician immediately. Special treatment (seeon this label). Note:Refer to supplemental first aid instruction. If immediate measures such as specific cleansing agent is advised. Immediately remove/take off all contaminated clothing. Wash contaminated clothing before next use	regulations (rules)
3	Wear protective gloves/ protective clothing. Note: manufacturer/supplier or the competent authority to specify type of protective equipment.	If ON SKIN: gently wash with plenty of soap and water. Call a POISON CENTRE or doctor/physician if you feel unwell. Special treatment (seeon this label). Note:Refer to supplemental first aid instruction. If immediate measures such as specific cleansing agent is advised. Immediately remove/take off all contaminated clothing. Wash contaminated clothing before next use.	Dispose of contents/ containers to note:fill in in accordance with local/ regional/ national/ international regulations (rules)
4	Wear protective gloves/ protective clothing. Note: manufacturer/supplier or the competent authority to specify type of protective equipment.	 If ON SKIN: gently wash with plenty of soap and water. Call a POISON CENTRE or doctor/physician if you 	Dispose of contents/ containers to note:fill in in accordance with local/ regional/ national/ international regulations (rules)

	5		feel unwell. Special treatment (seeon this label). Note:Refer to supplemental first aid instruction. If immediate measures such as specific cleansing agent is advised. Wash contaminated clothing before reuse. Call a POISON CENTRE or doctor/physician if you feel unwell.		
Acute toxicity - inhalation	1 2	Do not inhale dust/fume/gas/mist/vapours/ spray. Use only outdoors or in a well-ventilated area. Wear respiratory protection. Note: manufacturer/supplier or the competent authority to specify protective equipment.	IF INHALED: victim should be taken out into fresh air and should rest in a comfortable position which enables breathing. Immediately call a POISON CENTRE or doctor/physician. Specific treatment if urgent (Seeon this label). Note:Refer to supplemental first aid instruction. If immediate administration of antidote is required.	 Store in a well-ventilated place. Keep container tightly closed. Note: if product is volatile as to generate hazardous atmosphere. Store locked up. 	Dispose of contents/ containers to note:fill in in accordance with local/ regional/ national/ international regulations (rules)
	3	 Do not inhale dust/fume/gas/mist/vapours/ spray. Only use outdoors or in a well-ventilated area. 	 IF INHALED: victim should be taken out into fresh air and should rest in a comfortable position which enables breathing. Immediately call a POISON CENTRE or doctor/physician. Specific treatment if 	 Store in a well-ventilated place. Keep container tightly closed. Note: if product is volatile as to generate hazardous atmosphere. Store locked up. 	Dispose of contents/ containers to note:fill in in accordance with local/ regional/ national/ international regulations (rules)

	4	Do not inhale	urgent (Seeon this label). Note:Refer to supplemental first aid instruction. If immediate administration of antidote is required. • IF INHALED: victim		
	4	dust/fume/gas/mist/vapours/spray. Only use outdoors or in a well-ventilated area.	should be taken out into fresh air and should rest in a comfortable position which enables breathing. Call a POISON CENTRE or doctor/physician if you feel unwell.		
	5		IF INHALED: Call a POISON CENTRE or doctor/physician if you feel unwell.		
Skin corrosion/irritation	1A to 1C	Do not inhale dusts or mists. Note: if inhalable particles of dusts or mists may occur during use. Washthoroughly after handling note: manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling. Wear protective gloves/protective clothing/eye protection/face protection. Note: manufacturer/supplier or the competent authority to specify type of protective equipment.	IF SWALLOWED: rinse mouth. DO NOT induce vomiting. IF ON SKIN (or hair): remove/take off all contaminated clothing immediately. Rinse skin with water/shower. Wash contaminated clothing before reuse. IF INHALED: victim should be taken out into fresh air and should rest in a comfortable position which enables breathing. Call a POISON CENTRE or doctor/physician immediately. Specific treatment (seeon this label)	Store locked up.	Dispose of contents/ containers to note:fill in in accordance with local/ regional/ national/ international regulations (rules)

			note: refer to supplemental first aid instruction. manufacturer/supplier or the competent authority may specify a cleansing agent where appropriate. • IF IN EYE: rinse gently with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
	2	Washthoroughly after handling note: manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling. Wear protective gloves. Note: manufacturer/supplier or the competent authority to specify type of protective equipment.	IF ON SKIN: wash with plenty of soap and water. Specific treatment (seeon this label) note: refer to supplemental first aid instruction. manufacturer/supplier or the competent authority may specify a cleansing agent if appropriate. If skin irritation occurs: seek medical advice/ attention. Remove contaminated clothing and wash before reuse.	
	3		If skin irritation occurs: seek medical advice/ attention.	
Eye damage/ irritation	1	Wear eye protection/ face protection. Note: manufacturer/supplier or the competent authority to specify type of protective equipment.	 IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTRE or doctor/physician 	

	2A	Washthoroughly after handling note: manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling. Wear protective gloves/face protection.	 immediately. 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: seek medical advice/ 	
		Note: manufacturer/supplier or the competent authority to specify type of protective equipment.	attention.	
	2B	Washthoroughly after handling note: manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling.	 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: seek medical advice/attention. 	
Sensitisation - respiratory	1	Avoid breathing dust/fume/gas/mist/vapours/ spray. Note: manufacturer/supplier or the competent authority to specify applicable conditions. In case of inadequate ventilation wear respiratory protection. Note: manufacturer/supplier or the competent authority to specify protective equipment.	 IF INHALED: if breathing is difficult, victim should be taken out into fresh air and should rest in a comfortable position which enables breathing. If experiencing respiratory symptoms: call a POISON CENTRE or doctor/physician. 	Dispose of contents/ containers to note:fill in in accordance with local/ regional/ national/ international regulations (rules)
Sensitisation - skin	1	Avoid breathing dust/fume/gas/mist/vapours/ spray.	 IF ON SKIN: wash with plenty soap and water. If skin irritation occurs:	Dispose of contents/ containers to note:fill in in accordance with local/ regional/ national/ international

		Note: manufacturer/supplier or the competent authority to specify applicable conditions. • Contaminated work clothing should not be allowed out of the work place. Note: manufacturer/supplier or the competent authority to specify protective equipment.	seek medical advice/ attention. • Specific treatment (seeon this label) note: refer to supplemental first aid instruction. manufacturer/supplier or the competent authority may specify a cleansing agent if appropriate. • Contaminated clothing should be washed before reuse.		regulations (rules)
Germ cell mutagenicity	1 2	 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: seek medical advice/attention.	Store locked up.	Dispose of contents/ containers to note:fill in in accordance with local/ regional/ national/ international regulations (rules)
Carcinogenicity	1 2	 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: seek medical advice/attention.	Store locked up.	Dispose of contents/ containers to note:fill in in accordance with local/ regional/ national/ international regulations (rules)
Toxic to reproduction	1 2	 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: seek medical advice/attention.	Store locked up.	Dispose of contents/ containers to note:fill in in accordance with local/ regional/ national/ international regulations (rules)
	(Additional)	 Obtain special instructions before use. Do not inhale dusts or mists. 	If exposed or concerned: seek medical advice/attention.		

	Note: if inhalable particles of dusts or mists may occur during use. • Avoid contact during pregnancy /while nursing. • Washthoroughly after handling. Note:manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling. • Do not eat, drink or smoke at the work place when applying this product.			
Special target organ toxicity – single exposure	Do not inhale dust/fume/gas/mist/vapours/ spray. Note: manufacturer/supplier or the competent authority to specify applicable conditions. Washthoroughly after handling. Note:manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling. Do not eat, drink or smoke at the work place when applying this product.	If exposed: call a POISON CENTRE or doctor/physician. Specific treatment(seeon this label) note: refer to supplemental first aid instruction. If immediate measures are required.	Store locked up.	Dispose of contents/ containers to note:fill in in accordance with local/ regional/ national/ international regulations (rules)
2	Do not inhale dust/fume/gas/mist/vapours/ spray. Note: manufacturer/supplier or the competent authority to specify applicable conditions. Washthoroughly after handling. Note:manufacturer/supplier or the competent authority to specify	If exposed if you feel unwell: call a POISON CENTRE or doctor/physician.	Store locked up.	Dispose of contents/ containers to note:fill in in accordance with local/ regional/ national/ international regulations (rules)

	3	parts of the body to be washed after handling. • Do not eat, drink or smoke at the work place when applying this product. • Do not inhale dust/fume/gas/mist/vapours/spray. Note: manufacturer/supplier or the competent authority to specify applicable conditions. • Use only outdoors or in a well-ventilated area.	 IF INHALED: victim should be taken out into fresh air and should rest in a comfortable position which enables breathing. Call a POISON CENTRE or doctor/physician if you feel unwell. 		Dispose of contents/ containers to note:fill in in accordance with local/ regional/ national/ international regulations (rules)
Special target organ toxicity – repeated exposure	1	Do not inhale dust/fume/gas/mist/vapours/spray. Note: manufacturer/supplier or the competent authority to specify applicable conditions. Washthoroughly after handling. Note:manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling. Do not eat, drink or smoke at the work place when applying this product.	Seek medical advice/attention if you feel unwell.		Dispose of contents/ containers to note:fill in in accordance with local/ regional/ national/ international regulations (rules)
	2	Do not inhale dust/fume/gas/mist/vapours/ spray. Note: manufacturer/supplier or the competent authority to specify applicable conditions	Seek medical advice/attention if you feel unwell.		Dispose of contents/ containers to note:fill in in accordance with local/ regional/ national/ international regulations (rules)
Aspiration hazard	1 2		IF SWALLOWED: call a POISON CENTRE or doctor/physician	Store locked up.	Dispose of contents/ containers to note:fill in in accordance with local/ regional/ national/ international

		immediately.DO NOT induce vomiting.	regulations (rules)
Hazardous to the aquatic environment – acute hazard	1	Avoid release to the environment. Note: if this is not the intended use.	Dispose of contents/ containers to note:fill in in accordance with local/ regional/ national/ international regulations (rules)
	2 3	Avoid release to the environment. Note: if this is not the intended use.	Dispose of contents/ containers to note:fill in in accordance with local/ regional/ national/ international regulations (rules)
Hazardous to the aquatic environment – chronic hazard	1 2	Avoid release to the environment. Note: if this is not the intended use.	Dispose of contents/ containers to note:fill in in accordance with local/ regional/ national/ international regulations (rules)
	3 4	Avoid release to the environment. Note: if this is not the intended use.	Dispose of contents/ containers to note:fill in in accordance with local/ regional/ national/ international regulations (rules)