

RISK and SAFETY PHRASES

The following are the European Communities risk and safety coding and phrases -

RISK PHRASES

- R 1 Explosive when dry
- R 2 Risk of explosion by shock, friction, fire or other sources of ignition
- R 3 Extreme risk of explosion by shock, friction, fire or other sources of ignition
- R 4 Forms very sensitive explosive metallic compounds
- R 5 Heating may cause explosion
- R 6 Explosive with or without contact with air
- R 7 May cause fire
- R 8 Contact with combustible material may cause fire
- R 9 Explosive when mixed with combustible material
- R 10 Flammable
- R 11 Highly flammable
- R 12 Extremely flammable
- R 13 Extremely flammable liquefied gas
- R 14 Reacts violently with water
- R 15 Contact with water liberates highly flammable gases
- R 16 Explosive when mixed with oxidising substances
- R 17 Spontaneously flammable in air
- R 18 In use, may form flammable/explosive vapour-air mixture
- R 19 May form explosive peroxides
- R 20 Harmful by inhalation
- R 21 Harmful in contact with skin
- R 22 Harmful if swallowed
- R 23 Toxic by inhalation
- R 24 Toxic in contact with skin
- R 25 Toxic if swallowed
- R 26 Very toxic by inhalation
- R 27 Very toxic in contact with skin
- R 28 Very toxic if swallowed
- R 29 Contact with water liberates toxic gas
- R 30 Can become highly flammable in use
- R 31 Contact with acid liberates toxic gas
- R 32 Contact with acid liberates very toxic gas
- R 33 Danger of cumulative effects
- R 34 Causes burns
- R 35 Causes severe burns
- R 36 Irritating to eyes
- R 37 Irritating to respiratory system
- R 38 Irritating to skin
- R 39 Danger of very serious irreversible effects

- R 40 Possible risk of irreversible effects
- R 41 Risk of serious damage to eyes
- R 42 May cause sensitisation by inhalation
- R 43 May cause sensitisation by skin contact
- R 44 Risk of explosion if heated under confinement
- R 45 May cause cancer
- R 46 May cause heritable genetic damage
- R 47 May cause birth defects
- R 48 Danger of serious damage to health by prolonged exposure
- R 49 May cause cancer by inhalation
- R 50 Very toxic to aquatic organisms
- R 51 Toxic to aquatic organisms
- R 52 Harmful to aquatic organisms
- R 53 May cause long-term adverse effects in the aquatic environment
- R 54 Toxic to flora
- R 55 Toxic to fauna
- R 56 Toxic to soil organisms

- R 57 Toxic to bees
- R 58 May cause long-term adverse effects in the environment
- R 59 Dangerous for the ozone layer
- R60 May impair fertility.
- R61 May cause harm to the unborn child.
- R62 Risk of impaired fertility.
- R63 Possible risk of harm to the unborn child.
- R64 May cause harm to breastfed babies.

Combination phrases -

These are indicated by when numbers are separated by ‘/’. These are a combination of the risk phrases. eg. R 20/21/22 is: Harmful by inhalation, in contact with skin and if swallowed.

SAFETY PHRASES

- S 1 Keep locked up
- S 2 Keep out of reach of children
- S 3 Keep in a cool place
- S 4 Keep away from living quarters
- S 5 Keep contents under ___ (appropriate liquid to be specified by manufacturer)
- S 6 Keep contents under ___ (inert gas to be specified by manufacturer)
- S 7 Keep container tightly closed
- S 8 Keep container dry
- S 9 Keep container in a well ventilated space
- S 12 Do not keep the container sealed
- S 13 Keep away from food, drink and animal feed stuffs
- S 14 Keep away from ___ (incompatible materials to be specified by the manufacturer)
- S 15 Keep away from heat
- S 16 Keep away from sources of ignition - No smoking
- S 17 Keep away from combustible material
- S 18 Handle and open container with care
- S 20 When using do not eat or drink
- S 21 When using do not smoke
- S 22 Do not breathe dust
- S 23 Do not breathe gas/fumes/vapour/spray
- S 24 Avoid contact with skin
- S 25 Avoid contact with eyes
- S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
- S 27 Take off immediately all contaminated clothing
- S 28 After contact with skin, wash immediately with plenty of ___ (to be specified by manufacturer)
- S 29 Do not empty into drains
- S 30 Never add water to this product
- S 33 Take precautionary measures against static discharges
- S 34 Avoid shock and friction
- S 35 This material and its container must be disposed of in a safe way
- S 36 Wear suitable protective clothing
- S 37 Wear suitable gloves
- S 38 In case of insufficient ventilation, wear suitable respiratory equipment
- S 39 Wear eye/face protection
- S 40 To clean the floor and all objects contaminated by this material use ___ (to be specified by the manufacturer)
- S 41 In case of fire and/explosion do not breathe fumes
- S 42 During fumigation/spraying wear suitable respiratory equipment
- S 43 In case of fire, use ___ (indicate in the space the precise type of fire-fighting equipment. If water increases the risk add - Never use water)
- S 44 If you feel unwell, seek medical advice (show the label where possible)
- S 45 In case of accident or if you feel unwell, seek medical advice immediately
- S 46 If swallowed seek medical advice immediately and show this container or label

- S 47 Keep at temperature not exceeding __ °C (to be specified by the manufacturer)
- S 48 Keep wetted with __ (to be specified by the manufacturer)
- S 49 Keep only in the original container
- S 50 Do not mix with __ (to be specified by the manufacturer)
- S 51 Use only in well ventilated areas
- S 52 Not recommended for interior use on large surface areas
- S 53 Avoid exposure - obtain special instruction before use
- S 54 Obtain the consent of pollution control authorities before discharging to waste water treatment plants
- S 55 Treat using the best available techniques before discharge into drains or the aquatic environment
- S 56 Do not discharge into drains or the environment, dispose to an authorised waste collection point
- S 57 Use appropriate containment to avoid environmental contamination
- S 58 To be disposed of as hazardous waste
- S 59 Refer to manufacturer/supplier for information on recovery/recycling
- S 60 This material and/or its container must be disposed of as hazardous waste
- S61 Avoid release to the environment. Refer to special instructions / safety data sheets.
- S62 If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.

Combination phrases -

These are indicated by when numbers are separated by ‘/’. These are a combination of the safety phrases. eg. S 3/9/14 is: Keep in a cool, well-ventilated place away from _____ (incompatible materials to be indicated by manufacturer).