

ANNEXURE 2

SABS 0265: Formulae for the classification of preparations as 'toxic', 'harmful', 'corrosive' and 'irritant'

1. Very toxic preparations

$$\sum \left[\frac{P_{T+}}{L_{T+}} \right] \geq 1$$

where

P_{T+} = Concentration (by mass) of each very toxic substance in the preparation

L_{T+} = Concentration limit specified for each very toxic substance in percentage (by mass)

2. Toxic preparations

$$\sum \left[\frac{P_{T+}}{L_{T+}} + \frac{P_T}{L_T} \right] \geq 1$$

where

P_{T+} = Concentration (by mass) of each very toxic substance in the preparation

P_T = Concentration (by mass) of each toxic substance in the preparation

L_{T+} = Concentration limit specified for each very toxic substance in percentage (by mass)

L_T = Concentration limit specified for each toxic substance in percentage (by mass)

3. Harmful preparations

$$\sum \left[\frac{P_{T+}}{L_{X_n}} + \frac{P_T}{L_{X_n}} + \frac{P_{X_n}}{L_{X_n}} \right] \geq 1$$

where

P_{T+} = Concentration (by mass) of each very toxic substance in the preparation

P_T = Concentration (by mass) of each toxic substance in the preparation

P_{X_n} = Concentration (by mass) of each harmful substance in the preparation

L_{X_n} = Concentration limit specified for each very toxic, toxic or harmful substance in percentage (by mass)

4. Very corrosive preparations

$$\sum \left[\frac{P_{CR35}}{L_{CR35}} \right] \geq 1$$

where

P_{CR35} = Concentration (by mass) of each substance assigned to risk 35 (causes severe burns) in the preparation

L_{CR35} = Concentration limit specified for each substance assigned to risk 35 (causes severe burns) in percentage (by mass)

5. Corrosive preparations

$$\sum \left[\frac{P_{CR35}}{L_{CR34}} + \frac{P_{CR34}}{L_{CR34}} \right] \geq 1$$

where

P_{CR35} = Concentration (by mass) of each substance assigned to risk 35 (causes severe burns) in the preparation

P_{CR34} = Concentration (by mass) of each substance assigned to risk 34 (causes burns) in the preparation

L_{CR34} = Concentration limit specified for each substance assigned to risk 34 (causes burns) in percentage (by mass)

6. Skin irritants

$$\sum \left[\frac{P_{CR35}}{L_{X_i,R38}} + \frac{P_{CR34}}{L_{X_i,R38}} + \frac{P_{X_i,R38}}{L_{X_i,R38}} \right] \geq 1$$

where

P_{CR35} = Concentration (by mass) of each substance assigned to risk 35 (causes severe burns) in the preparation

P_{CR34} = Concentration (by mass) of each substance assigned to risk 34 (causes burns) in the preparation

$P_{X_i,R38}$ = Concentration (by mass) of each substance assigned to risk 38 (irritating to skin) in the preparation

$L_{X_i,R38}$ = Concentration limit specified for each corrosive or irritant substance assigned to risk 38 (irritating to skin) in percentage (by mass)

7. Severe eye irritants

$$\sum \left[\frac{P_{X_i R41}}{L_{X_i R41}} \right] \geq 1$$

where

$P_{X_i R41}$ = Concentration (by mass) of each substance assigned to risk 41 (risk of serious damage to eyes) in the preparation

$L_{X_i R41}$ = Concentration limit specified for each substance assigned to risk 41 (risk of serious damage to eyes) in percentage (by mass)

8. Eye irritants

$$\sum \left[\frac{P_{X_i R41}}{L_{X_i R36}} + \frac{P_{X_i R36}}{L_{X_i R36}} \right] \geq 1$$

where

$P_{X_i R41}$ = Concentration (by mass) of each substance assigned to risk 41 (risk of serious damage to eyes) in the preparation

$P_{X_i R36}$ = Concentration (by mass) of each substance assigned to risk 36 (irritating to eyes) in the preparation

$L_{X_i R36}$ = Concentration limit specified for each substance assigned to risk 36 (irritating to eyes) in percentage (by mass)

9. Irritants to the respiratory system

$$\sum \left[\frac{P_{X_i R37}}{L_{X_i R37}} \right] \geq 1$$

where

$P_{X_i R37}$ = Concentration (by mass) of each substance assigned to risk 37 (irritating to respiratory system) in the preparation

$L_{X_i R37}$ = Concentration limit specified for each substance assigned to risk 37 (irritating to respiratory system) in percentage (by mass)