





Substance	Hazard	Comment
Sodium and potassium chloride, bromide and iodide <i>Solid & solution</i>	LOW HAZARD	People have been killed through consuming very large amounts of salt. At 'normal' levels, can cause high blood pressure, hence heart disease. Adults should not eat more than 6 g/day, children less. Potassium chloride is approved food additive, E508, used as a 'low-salt' substitute.
Sodium sulfate(VI) <i>Also potassium sulfate(VI)</i> <i>Solid & solution</i>	LOW HAZARD	Hydrated sodium sulfate(VI), $\text{Na}_2\text{SO}_4 \cdot 10\text{H}_2\text{O}$ is known as Glauber's salt. Sodium sulfate(VI) is an approved food additive, E514, as is the potassium salt, E515.
Sodium hydrogensulfate(VI) (bisulfate) Solid and concentrated solution (<i>If 0.25 M or more</i>)	 CORROSIVE	DANGER: Causes serious eye damage. It is strongly acidic because of acidic hydrogen in NaHSO_4 . It is used in some toilet cleaners.
Sodium hydrogensulfate(VI) (bisulfate) Dilute solutions (<i>less than 0.2M but more than 0.1M</i>)	 IRRITANT	WARNING: Causes serious eye irritation. It is strongly acidic because of acidic hydrogen in NaHSO_4 .
Sodium hydrogensulfate(VI) (bisulfate) Very dilute solutions (<i>< 0.1M</i>)	LOW HAZARD	It is strongly acidic because of acidic hydrogen in NaHSO_4 .
Sodium and potassium ethanedioate (oxalate) <i>Solid</i>	 HARMFUL	WARNING: harmful if swallowed and in contact with skin.
Sodium and potassium ethanedioate (oxalate) <i>Solution</i>	LOW HAZARD	Note that all sodium and potassium ethanedioate (oxalate) <i>solutions</i> are LOW HAZARD EXCEPT WARNING: potassium ethanedioate is harmful if swallowed if $\geq 1.5 \text{ M}$.
Sodium nitrate(V) <i>Also potassium nitrate(V)</i> <i>Solid and solutions</i>	 OXID. IRRITANT	WARNING: Oxidiser Sodium nitrate(V) solid and solutions are harmful if swallowed (more than 3 M) and irritating to eyes and skin (more than 1 M).
Sodium or potassium carbonate and hydrogencarbonate.		See CLEAPSS <i>Student Safety Sheet 33</i>
Sodium chlorate(I) (hypochlorite)		See CLEAPSS <i>Student Safety Sheet 41</i> .
Sodium or potassium chromate(VI) or dichromate(VI)		See CLEAPSS <i>Student Safety Sheet 47</i> .
Sodium or potassium manganate(VII) (permanganate)		See CLEAPSS <i>Student Safety Sheet 48</i> .

Typical control measures to reduce risk

- Wear eye protection when handling hazardous solids and solutions and avoid raising dust.

Assessing the risks

- What are the details of the activity to be undertaken? What are the hazards?**
- What is the chance of something going wrong?**
eg, specks of solid transferred into the eye, by rubbing with a contaminated finger.
- How serious would it be if something did go wrong?**
eg, are there hazardous reaction products (such as chlorine from the electrolysis of sodium chloride)?
- How can the risk(s) be controlled for this activity?**
eg, can it be done safely? Does the procedure need to be altered? Should goggles or safety spectacles be worn?

Emergency action

- In the eye** Flood the eye with gently-running tap water for 10 minutes. Consult a medic if pain persists.
- Swallowed** Do no more than wash out the mouth with drinking water. Do **not** induce vomiting. Consult a medic.
- Spilt on the skin or clothing** Brush solid off contaminated clothing. Rinse skin or clothing as necessary.
- Spilt on the floor, bench, etc** Brush up solid spills, trying not to raise dust, then wipe with a damp cloth. Wipe up solutions spills and rinse well.