

**RockAccel 60**

## Material Safety Data Sheet

**1. Description**

RockAccel 60 is a liquid, high performance alkali-free set accelerator for sprayed concrete, whose dosage can be varied to the desired setting and hardening times.

**2. Composition/Information on ingredients**

Chemical name	CAS-No. EC-No. Registration number	Classification (SANS 10234)	Concentration (% w/w)
aluminium sulphate	10043-01-3 233-135-0 01-2119531538-36- XXXX	Met. Corr.1; H290 Eye Dam.1; H318	>= 60 - < 80
2,2'-iminodiethanol	111-42-2 203-868-0 01-2119488930-28- XXXX	Acute Tox.4; H302 Skin Irrit.2; H315 Eye Dam.1; H318 STOT RE2; H373 Repr.2; H361fd	>= 1 - < 2,5

**3. Hazard Identification****Classification of the substance or mixture****Classification (SANS 10234)**

Corrosive to metals, Category 1 H290: May be corrosive to metals. Serious eye damage, Category 1 H318: Causes serious eye damage.

**Label Elements****Labelling (SANS 10234)**

Hazard Pictograms:



Signal Word: DANGER

**Product Identifiers:**

CAS 7784-31-8 Aluminium Sulfate Octadecahydrate  
EC 203-868-0 Diethanolamine

**Hazard Statements:**

H318 Causes serious eye damage  
H290 May be corrosive to metals.

**Precautionary Statements – Prevention:**

P234 Keep only in original packaging.  
P280 Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements – Response:**

P305 + P351 + P338 + P310

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.

P390

Absorb spillage to prevent material damage.

**Hazardous components which must be listed on the label:**

Aluminium sulphate

**Other Hazards**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### 4. First Aid Measures

As a general rule, in case of doubt of if symptoms persist, always call a doctor.

**NEVER induce swallowing by an unconscious person.**

**Description of First Aid Measures**

**In the event of splashes or contact with eyes:**

- Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.
- Regardless of the initial state, refer the patient to an ophthalmologist and show him the label.

**In the event of swallowing:**

- Seek medical attention, showing the label.

**Most important symptoms and effects, both acute and delayed:**

No data available

**Indication of any immediate medical attention and special treatment needed.**

No data available.

## 5. Firefighting Measures

Non-Flammable.

### Suitable Extinguishing Media:

- No data available.

### Special Hazards arising from the substance or mixture:

- A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.
- Do not breath in smoke
- In the event of a fire, the following may be formed:
  - Carbon Monoxide (CO)
  - Carbon Dioxide (CO<sub>2</sub>)
  - Nitrogen Oxide (NO)
  - Nitrogen Dioxide (NO<sub>2</sub>)

### Advice for firefighters:

No data available

## 6. Accidental Release Measures

### Personal Precautions, Protective Equipment and Emergency Procedures:

- Consult the safety measures listed under headings 7 and 8.  
For Non First Aid Worker:
- Avoid any contact with the skin and eyes.  
For First Aid Worker:
- First aid workers will be equipped with suitable personal protective equipment (See section 8).

### Environmental precautions:

- Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.
- Prevent any material from entering drains or waterways.

### Methods and Materials for Containment and Cleaning Up:

- Neutralise with an alkaline decontaminant, such as an aqueous solution of sodium carbonate or similar.
- If the ground is contaminated, once the product has been recovered by sponging with an inert and non-combustible absorbent material, wash the contaminated area in plenty of water.
- Clean preferably with a detergent, do not use solvents.

### Reference to other sections:

- No data available.

## 7. Handling and Storage

Requirements relating to storage premises apply to all facilities where the mixture is handled

**Precautions for Safe Handling:**

- Always wash hands after handling.
- Remove and wash contaminated clothing before re-using.
- Emergency showers and eye wash stations will be required in facilities where the mixture is handled constantly.

Fire Prevention:

- Prevent access by unauthorized personnel.

Recommended equipment and procedures:

- For personal protection, see section 8.
- Observe precautions stated on labels and also industrial safety regulations.

Prohibited equipment and procedures:

- No smoking, eating or drinking in areas where the mixture is used.

**Conditions for Safe Storage, Including any Incompatibilities**

- No data available.

Packaging

- Always keep in packaging made of an identical material to the original.

Specific end use(s)

- No data available.

**8. Exposure controls and personal protection**

**Control Parameters:**

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
aluminium sulphate	10043-01-3	OEL-RL	2 mg/m <sup>3</sup> (Aluminium)	ZA OEL
Further information: Occupational Exposure Limits - Restricted Limits For Hazardous Chemical Agents				
2,2'-iminodiethanol	111-42-2	OEL-RL (inhalable fraction and vapour)	2 mg/m <sup>3</sup>	ZA OEL
Further information: danger of cutaneous absorption, Occupational Exposure Limits - Restricted Limits For Hazardous Chemical Agents, denotes carcinogenicity, which is based on GHS categorisation, including category 1A, 1B				

**Exposure Controls**

Personal protection measures, such as personal protective equipment:

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE):



- Use personal protective equipment that is clean and has been properly maintained.
- Store personal protective equipment in a clean place, away from the work area.
- Never eat, drink or smoke during use.

- Remove and wash contaminated clothing before re-using.
- Ensure that there is adequate ventilation, especially in confined areas.

#### Eye/Face Protection:

- Avoid contact with eyes.
- Use eye protection designed to protect against liquid splashes.
- Before handling, wear safety goggles with protective sides accordance with standard EN166
- In the event of high danger, protect the face with a face shield.
- Prescription glasses are not considered as protection.
- Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.
- Provide eyewash stations in facilities where the product is handled constantly.

#### Hand Protection:

- Wear suitable protective gloves in the event of prolonged or repeated skin contact.
- Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.
- Gloves must be selected according to the application and duration of use at the workstation.
- Protective gloves need to be selected according to their suitability for the workstation in question: other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.
- Types of gloves recommended:
  - Natural latex
  - Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))
  - PVC (Polyvinyl Chloride)
  - Butyl Rubber (Isobutylene-isoprene copolymer)
- Recommended properties:
  - Impervious gloves in accordance with standard EN374

#### Body Protection:

- Avoid skin contact.
- Wear suitable protective clothing.
- Suitable type of protective clothing.
- In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605 to prevent skin contact.
- In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034 to prevent skin contact.
- Wear suitable protective clothing, in particular overalls and boots. These items must be kept in good condition and cleaned after use.
- Work clothing worn by personnel shall be laundered regularly.
- After contact with the product, all parts of the body that have been soiled must be washed.

## 9. Physical and Chemical Properties

Physical State and Appearance	Fluid Liquid
Odour	Odourless
Colour	Brown

pH	3 Slightly Acidic
Density at 20 °C	>1000 kg.m <sup>-3</sup>
Water Solubility:	Soluble

## 10. Stability and Reactivity

### Reactivity

No data available.

### Chemical Stability:

This mixture is stable under the recommended handling and storage conditions in section 7.

### Possibility of Hazardous Reactions:

No data available.

### Conditions to avoid:

Avoid: Frost

### Incompatible Materials:

No data available.

### Hazardous Decomposition Products:

The thermal decomposition may release/form:

- Carbon Monoxide (CO)
- Carbon Dioxide (CO<sub>2</sub>)
- Nitrogen Oxide (NO)
- Nitrogen Dioxide (NO<sub>2</sub>)

## 11. Toxicological Information

### Information on Toxicological Effects

- May have irreversible effects on the eyes, such as tissue damage in the eye, or serious physical decay of sight, which is not fully reversible by the end of observation at 21 days.
- Serious eye damage is typified by the destruction of cornea, persistent corneal opacity and iritis.

### Substances

Acute Toxicity:

Diethanolamine (CAS: 111-42-2)

#### Oral Route:

LD50 = 1600 mg/kg

Species: Rat

OECD Guideline 401 (Acute Oral Toxicity)

OECD Guideline 403 (Acute Inhalation Toxicity)

#### Skin corrosion/Skin Irritation:

Diethanolamine (CAS: 111-42-2)

Effect observed: Overall irritation score

Species: Rabbit

Duration of exposure: 24h

**Serious Damage to Eyes/Eye Irritation:**

Diethanolamine (CAS: 111-42-2)

- Causes serious eye damage
- Cornea Haze: Average score > = 3  
Species: Rabbit
- Iritis: Average score > 1.5  
Species: Rabbit

**Mixture**

No toxicological data available for the mixture

Monograph(s) from the IARC (International Agency for Research on Cancer):

CAS 111-42-2: IARC Group 2B: The agent is possibly carcinogenic to humans

## 12. Ecological Information

**Toxicity**

**Substances**

Diethanolamine (CAS: 111-42-2)

Fish Toxicity:

LC50 = 1460 mg/l  
Species: Pimephales Promelas  
Duration of Exposure: 96h

**Crustacean Toxicity:**

EC50 = 55 mg/l  
Species: Daphnia Magna  
Duration of Exposure: 48h

**Algae Toxicity:**

ECr50 = 2.2 mg/l  
Species: Pseudokirchnerella Subcapitata  
Duration of Exposure: 48h

**Mixtures**

No aquatic toxicity data available for the mixture

**Persistence and degradability**

**Substances**

Diethanolamine (CAS: 111-42-2)

**Biodegradability:**

No degradability data is available, the substance is considered as not degrading quickly.

**Bioaccumulative Potential:**

No data available

**Mobility in Soil:**

No data available

**Results of PBT and vPvB Assessment:**

No data available

**Other Adverse Effects:**

No data available

## 13. Disposal Considerations

Proper waste management of the mixture and/or its containers must be determined in accordance with Directive 2008/98/EC.

**Waste Treatment Methods:**

Do not pour into drains or waterways.

**Waste:**

- Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.
- Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.
- Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

**Soiled Packaging:**

- Empty container completely. Keep label(s) on.
- Give to a certified disposal contractor.

#### 14. Transport Information

Exempt from transport classification and labelling.

#### 15. Regulatory Information

**Safety, health and environmental regulations/legislation specific for the substance or mixture - Classification and labelling information included in section 2:**

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 487/2013
- EU Regulation No. 1272/2008 amended by EU Regulation No. 758/2013
- EU Regulation No. 1272/2008 amended by EU Regulation No. 944/2013
- EU Regulation No. 1272/2008 amended by EU Regulation No. 605/2014
- EU Regulation No. 1272/2008 amended by EU Regulation No. 1297/2013

**- Container Information:**

No data available.

**- Particular Provisions:**

No data available.

**Chemical Safety Assessment:**

No data available.

#### 16. Other Information

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations. The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

**Wording and phrases mentioned in section 3:**

H272	May intensify fire; oxidizer
H290	May be corrosive to metals
H301	Toxic if swallowed
H314	Causes severe skin burns and eye damage
H319	Causes serious eye irritation
H400	Very toxic to aquatic life

**Abbreviations:**

ADR:	European agreement concerning the international carriage of dangerous goods by Road.
IMDG:	International Maritime Dangerous Goods
IATA :	International Air Transport Association.
ICAO:	International Civil Aviation Organisation
RID:	Regulations concerning the International carriage of Dangerous goods by rail.
WGK:	Wassergefahrdungsklasse (Water Hazard Class)
GHS <sub>05</sub> :	Corroion
PBT:	Persistent, bioaccumable and toxic
vPvB:	Very persistent, very bioaccumulable