

SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name: REACTIF ALCOLOR

1.2. Relevant identified uses of the substance or mixture and uses advised against

Reagent for breathalyser.

1.3. Details of the supplier of the safety data sheet

Registered company name: CONTRALCO.

Address : ZA des Armillières - BP 23.34150.GIGNAC.France. Telephone : +33 (0)4 11 93 10 10. Fax : +33 (0)4 11 93 10 21.

Email: dcalas@contralco.com http://www.contralco.com

1.4. Emergency telephone number: +33 (0)1 45 42 59 59.

Association/Organisation: INRS / ORFILA http://www.centres-antipoison.net.

Other emergency numbers

National Poisons Information Service of England: http://npis.org - NHS 111: dial 111 - National Poisons Information Centre of Ireland: 353 (1) 809 2166 - European Emergency Number Association (EENA): 112

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Acute inhalation toxicity, Category 4 (Acute Tox. 4, H332).

Skin corrosion, Category 1A (Skin Corr. 1A, H314).

Serious eye damage, Category 1 (Eye Dam. 1, H318).

May produce an allergic reaction (EUH208).

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms:





GHS05

GHS07

Signal Word : DANGER

Product identifiers:

EC 231-639-5 SULPHURIC ACID

Additional labeling:

EUH208 Contains DIAMMONIUM HEXANITRATOCERATE. May produce an allergic reaction.

Hazard statements:

H314 Causes severe skin burns and eye damage.

H332 Harmful if inhaled.

Precautionary statements - Prevention:

P260 Do not breathe dust.

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements - Response:

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or

shower1.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing.

P312 Call a POISON CENTER/doctor/if you feel unwell.

P363 Wash contaminated clothing before reuse.

Precautionary statements - Disposal:

P501 Dispose of contents/container at a disposal facility in accordance with local regulations.

Other information:

2.3. Other hazards

In use, may form flammable/explosive dust-air mixture.

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

The mixture does not contains substances> 0.1% with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition:

Identification	(EC) 1272/2008	Note	%
CAS: 7664-93-9	GHS05	В	$25 \le x \% < 50$
EC: 231-639-5	Dgr	[1]	
REACH: 01-2119458838-20	Met. Corr. 1, H290		
	Skin Corr. 1A, H314		
SULPHURIC ACID			
CAS: 7631-86-9		[1]	25 <= x % < 50
EC: 231-545-4			
REACH: 01-2119379499-16			
SILICON DIOXIDE			
CAS: 16774-21-3	GHS07, GHS05, GHS03		$0.1 \le x \% < 1$
EC: 240-827-6	Dgr		
REACH: 01-2119971819-18	Ox. Sol. 2, H272		
	Met. Corr. 1, H290		
DIAMMONIUM HEXANITRATOCERATE	Acute Tox. 4, H302		
	Skin Corr. 1C, H314		
	Skin Sens. 1, H317		
	Eye Dam. 1, H318		

Specific concentration limits:

Identification	Specific concentration limits	ATE
CAS: 7664-93-9	Skin Corr. 1A: H314 C>= 15%	
EC: 231-639-5	Skin Irrit. 2: H315 5% <= C < 15%	
REACH: 01-2119458838-20	Eye Dam. 1: H318 C>= 15%	
	Eye Irrit. 2: H319 5% <= C < 15%	
SULPHURIC ACID	-	

Information on ingredients:

(Full text of H-phrases: see section 16)

[1] Substance for which maximum workplace exposure limits are available.

SECTION 4: FIRST AID MEASURES

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

NEVER induce swallowing by an unconscious person.

4.1. description of first aid measures

In the event of exposure by inhalation:

In the event of massive inhalation of dust, remove the person exposed to fresh air. Keep warm and at rest.

If breathing is irregular or has stopped, effect mouth-to-mouth resuscitation and call a doctor.

Do not proceed with mouth-to-mouth or mouth-to-nose resuscitation. Use the appropriate equipment.

In the event of an allergic reaction, seek medical attention.

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.

If there is any redness, pain or visual impairment, consult an ophthalmologist.

In the event of splashes or contact with skin:

Remove any soiled or splashed clothing immediately.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

In the event of an allergic reaction, seek medical attention.

In the event of an allergic reaction, seek medical attention.

In the event of swallowing:

Do not give the patient anything orally.

Seek medical attention immediately, showing the label.

4.2. Most important symptoms and effects, both acute and delayed

No data available.

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

No data available.

SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

No data available.

5.2. 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 breathe in smoke.

5.3. Advice for firefighters

Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. 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.

Avoid inhaling dust.

If a large quantity has been spilt, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Retrieve the product by mechanical means (sweeping/vacuuming): do not generate dust.

6.4. Reference to other sections

No data available.

SECTION 7: HANDLING AND STORAGE

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

7.1. 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:

Handle in well-ventilated areas.

Prevent access by unauthorised personnel.

Recommended equipment and procedures:

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Do not breathe in dust.

Also provide breathing apparatus for certain short tasks of an exceptional nature and for emergency interventions.

In all cases, recover emissions at source.

Prohibited equipment and procedures:

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

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep the container tightly closed in a dry, well-ventilated place.

Packaging

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

7.3. Specific end use(s)

No data available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits:

- European Union	(2019/1831,	2017/2398,	2017/164,	2009/161,	2006/15/CE,	2000/39/CE,	98/24/CE):

CAS	VME-mg/m3:	VME-ppm:	VLE-mg/m3:	VLE-ppm:	Notes:	
7664-93-9	0.05	-	-	-	-	

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010):

CAS	TWA:	STEL:	Ceiling:	Definition:	Criteria:
7664-93-9	0.2 (T) mg/m3			A2 (M)	

- Germany - AGW (BAuA - TRGS 900, 08/08/2019) :

CAS	VME :	VME :	Excess	Notes
7664-93-9		0.1 E mg/m ³		1(I)
7631-86-9		4E mg/m³		

- Australia (NOHSC: 3008, 1995):

CAS	TWA:	STEL:	Ceiling:	Definition:	Criteria:
7664-93-9	1 mg/m3	3 mg/m3		Н	
7631-86-9	2 mg/m3			A	

- Austria (BGBl. II, 254/2018, 382/2020):

CAS	TWA:	STEL:	Ceiling:	Definition:	Criteria:
7664-93-9	0.1 E mg/m ³	0.2 E mg/m ³			
7631-86-9	4 mg/m³				

- Belgium (Arrêté du 19/11/2020) :

CAS	TWA:	STEL:	Ceiling:	Definition:	Criteria:
7664-93-9	0.2 mg/m^3			C	

- France (INRS - ED984 / 2020-1546):

CAS	VME-ppm	: VME-mg/m3	: VLE-ppm :	VLE-mg/m3:	Notes:	TMP No:	
7664-93-9	_	0.05t	_	3	-	_	

- Switzerland (SUVAPRO 2019):

CAS	VME	VLE	Valeur plafond	Notations
7664-93-9	0.1 ppm	0.2 mg/m ³		
7631-86-9	4 ppm			

- UK / WEL (Workplace exposure limits, EH40/2005, Fourth Edition 2020):

CAS	TWA:	STEL:	Ceiling:	Definition:	Criteria:
7664-93-9	0.05 mg/m^3			The mist is	
				defined as the	
				thoracic	
				fraction	

- USA / OSHA PEL (Occupational Safety and Health Administration, Permissible Exposure Limits) :

CAS	TWA:	STEL:	Ceiling:	Definition:	Criteria:
7664-93-9	1 mg/m3				

8.2. 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.

Before handling powders or dust emission, wear mask goggles in accordance with standard EN166.

Prescription glasses are not considered as protection.

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 EN ISO 374-1.

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.

Type of gloves recommended:

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))

- Body protection

Avoid skin contact.

Wear suitable protective clothing.

These clothes shall be chosen to ensure there is no inflammation or irritation of the skin at the neck and wrist by contact with the powder Suitable type of protective clothing:

Wear protective clothing against solid chemicals and particles suspended in the air (type 5) in accordance with standard EN13982-1/A1 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.

- Respiratory protection

Avoid inhaling dust.

If the ventilation is insufficient, wear appropriate breathing apparatus.

When workers are confronted with concentrations that are above occupational exposure limits, they must wear a suitable, approved, respiratory protection device.

Type of FFP mask:

Wear a disposable half-mask dust filter in accordance with standard EN149/A1.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state

Physical state: Powder or dust.

Colour

Unspecified

Odour

Odour threshold: Not stated.

Freezing point

Freezing point / Freezing range: Not stated.

Boiling point or initial boiling point and boiling range

Boiling point/boiling range: Not relevant.

Flammability

Flammability (solid, gas): Not stated.

Lower and upper explosion limit

Explosive properties, lower explosivity limit (%): Not stated. Explosive properties, upper explosivity limit (%): Not stated.

Flash point

Flash point interval: Not relevant.

Auto-ignition temperature

Self-ignition temperature : Not relevant.

Decomposition temperature

Decomposition point/decomposition range: Not relevant.

pН

pH (aqueous solution):

pH:

Not stated.

Not relevant.

Kinematic viscosity

Viscosity: Not stated.

Solubility

Water solubility: Dilutable.
Fat solubility: Not stated.

Partition coefficient n-octanol/water (log value)

Partition coefficient: n-octanol/water: Not stated.

Vapour pressure

Vapour pressure (50°C): Not relevant.

Density and/or relative density

Density: >1

Relative vapour density

Vapour density: Not stated.

9.2. Other information

No data available.

9.2.1. Information with regard to physical hazard classes

No data available.

9.2.2. Other safety characteristics

No data available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Avoid:

- formation of dusts
- frost
- humidity

Dusts can form an explosive mixture with air.

10.5. Incompatible materials

Keep away from:

- water
- strong bases
- oxidising agents
- metals

10.6. Hazardous decomposition products

No data available.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Harmful by inhalation.

May cause irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis, following exposure for up to three minutes.

Corrosive reactions are typified by ulcers, bleeding, bloody scabs, and, by the end of observation at 14 days, by discolouration due to blanching of the skin, complete areas of alopecia, and scars.

11.1.1. Substances

Acute toxicity:

DIAMMONIUM HEXANITRATOCERATE (CAS: 16774-21-3)

Oral route: 300 < LD50 <= 2000 mg/kg

Species: Rat

Dermal route: 2,000 < LD50 <= 5000 mg/kg

Species: Rat

SILICON DIOXIDE (CAS: 7631-86-9)

Oral route: LD50 > 5000 mg/kg

Species: Rat

OECD Guideline 401 (Acute Oral Toxicity)

LD50 > 6000 mg/kg Dermal route:

Species: Rabbit

11.1.2. Mixture

Acute toxicity:

Inhalation route (Dusts/mist): Harmful by inhalation.

> Duration of exposure: 4 h 1 < LC50 <= 5 mg/l

Respiratory or skin sensitisation:

Contains at least one sensitising substance. May cause an allergic reaction.

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

CAS 7631-86-9: IARC Group 3: The agent is not classifiable as to its carcinogenicity to humans.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Substances

SILICON DIOXIDE (CAS: 7631-86-9)

Crustacean toxicity: EC50 > 1000 mg/l

Species: Daphnia magna Duration of exposure: 24 h

OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Algae toxicity: ECr50 > 10000 mg/l

Species: Scenedesmus subspicatus

Duration of exposure: 72 h

OECD Guideline 201 (Alga, Growth Inhibition Test)

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

12.2.1. Substances

DIAMMONIUM HEXANITRATOCERATE (CAS: 16774-21-3)

Biodegradability: no degradability data is available, the substance is considered as not degrading

quickly.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Endocrine disrupting properties

No data available.

12.7. Other adverse effects

No data available.

German regulations concerning the classification of hazards for water (WGK, AwSV vom 18/04/2017, KBws):

WGK 1: Slightly hazardous for water.

SECTION 13: DISPOSAL CONSIDERATIONS

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

13.1. 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 container.

Give to a certified disposal contractor.

SECTION 14: TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2021 - IMDG 2020 - ICAO/IATA 2021).

14.1. UN number or ID number

1759

14.2. UN proper shipping name

UN1759=CORROSIVE SOLID, N.O.S.

(sulphuric acid ...%, diammonium hexanitratocerate)

14.3. Transport hazard class(es)

- Classification:



8

14.4. Packing group

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14.5. Environmental hazards

14.6. Special precautions for user

ADR/RID Class Code Pack gr. Label Ident. LQ Provis. EQ Cat. Tunnel 8 C10 II 8 80 1 kg 274 E2 2 E

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ	Stowage	Segregation
								Handling	
	8	-	II	1 kg	F-A. S-B	274	E2	Category A	-

IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	8	-	II	859	15 kg	863	50 kg	A3 A803	E2
	8	-	II	Y844	5 kg	-	-	A3 A803	E2

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information

15.1. 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. 2021/643 (ATP 16)
- EU Regulation No. 1272/2008 amended by EU Regulation No. 2021/849 (ATP 17)

- Container information:

No data available.

- Particular provisions:

No data available.

- German regulations concerning the classification of hazards for water (WGK, AwSV vom 18/04/2017, KBws):

WGK 1: Slightly hazardous for water.

15.2. Chemical safety assessment

No data available.

SECTION 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 of the phrases mentioned in section 3:

H272	May intensify fire; oxidiser.
H290	May be corrosive to metals.
H302	Harmful if swallowed.

H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

Abbreviations :

LD50: The dose of a test substance resulting in 50% lethality in a given time period.

LC50: The concentration of a test substance resulting in 50% lethality in a given period.

EC50 : The effective concentration of substance that causes 50% of the maximum response.

ECr50 : The effective concentration of substance that causes 50% reduction in growth rate.

REACH: Registration, Evaluation, Authorization and Restriction of Chemical Substances.

STEL: Short-term exposure limit

TWA: Time Weighted Averages

TMP: French Occupational Illness table

TLV : Threshold Limit Value (exposure)

AEV: Average Exposure Value.

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).

GHS05: Corrosion

GHS07: Exclamation mark

PBT: Persistent, bioaccumulable and toxic. vPvB: Very persistent, very bioaccumulable. SVHC: Substances of very high concern.