

SAFETY DATA SHEET

(in accordance with Regulation (EU) 2020/878)



RIODIN HE - RIODIN XE

Version 1 Date of compilation: 8/07/2020

Version 6 (replaces version 5)

Revision date: 28/07/2022

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

1.1 Product identifier.

Product Name: RIODIN HE - RIODIN XE

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

Nitroester-based gelatinous explosive that is made from oxidizing salts and fuels and is detonator sensitive, used for civil use in quarries, general mining and public construction work.

Uses advised against:

Uses other than those recommended.

1.3 Details of the supplier of the safety data sheet.

Company: **MaxamCorp International, S.L.**
Address: Avenida del Partenón 16
City: 28042 Madrid
Province: Madrid
Telephone: +(34)917220217
Fax: +(34)917220107
E-mail: environment@maxamcorp.com
Web: www.maxamcorp.com

1.4 Emergency telephone number: +(34) 917220100 (Only available during office hours; Monday-Friday; 08:00-18:00)

SECTION 2: HAZARDS IDENTIFICATION.

2.1 Classification of the substance or mixture.

In accordance with Regulation (EU) No 1272/2008:

Acute Tox. 1 : Fatal in contact with skin.

Acute Tox. 2 : Fatal if swallowed.

Expl. 1.1 : Explosive; mass explosion hazard.

Ox. Sol. 3 : May intensify fire; oxidiser.

STOT RE 2 : May cause damage to organs through prolonged or repeated exposure.

2.2 Label elements.

Labelling in accordance with Regulation (EU) No 1272/2008:

Pictograms:



Signal Word:

Danger

Hazard statements:

H201 Explosive; mass explosion hazard.

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Precautionary statements:

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P250 Do not subject to grinding/shock/friction.
P370+P372+P380+P373 In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives.
P401 Store in accordance with applicable local regulations
P501 Dispose of contents/container in accordance with applicable local regulations

2.3 Other hazards.

The mixture does not contain substances classified as PBT.
The mixture does not contain substances classified as vPvB.
The mixture does not contain any endocrine disrupting properties substances.

The product may have the following additional risks:

Risks presented upon inhalation and contact with the skin, as well as ingestion, due to the nitroesther content. May cause headaches, nausea, dilation of peripheral blood vessels and a drop in blood pressure.

May mass detonate as a result of: impact, friction, fire, spark or due to the vibration of a nearby explosion. Explosion produces a strong excess pressure and heat and may cause serious physical injury and even death.

IMPORTANT: Do not use this explosive in jobs that contain or may contain flammable gases and/or powders.

The smoke resulting from detonation and combustion is toxic. It contains nitrogen oxides (NOx) and odourless and colourless carbon oxides (CO and CO₂). Symptoms caused by exposure to the detonation's toxic fumes are: headache, nausea, fatigue, confusion and fainting. It may also cause irritation in the respiratory system, bronchitis, and bronchopneumonia; in serious cases, acute pulmonary oedema and death may result.

IMPORTANT: In surface and interior explosions these residual fumes may migrate underground to confined spaces (including tunnels, wells, basements, etc.) where they accumulate and can remain for a long period of time. To enter these locations after an explosion, always follow the rules for entry into confined spaces and always verify that there are no toxic fumes present before entering.

Rock blasting may produce large-sized fragments, in non-stable positions, with risks of landslides and aerial projections.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.

3.1 Substances.

Not Applicable.

3.2 Mixtures.

Substances posing a danger to health or the environment in accordance with the Regulation (EC) No. 1272/2008, assigned a Community exposure limit in the workplace, and classified as PBT/vPvB or included in the Candidate List:

Identifiers	Name	Concentrate	(*)Classification - Regulation (EC) No 1272/2008	
			Classification	Specifics concentration limits and Acute toxicity estimate
Index No: 603-032-00-9 CAS No: 628-96-6 EC No: 211-063-0 Registration No: 01-2119492860-31-XXXX	[2] ethylene dinitrate, ethylene glycol dinitrate	10 - 49.99 %	Acute Tox. 1, H310 - Acute Tox. 2 *, H330 - Acute Tox. 2 *, H300 - STOT RE 2, H373** - Unst. Expl., H200	-

(*) The complete text of the H phrases is given in section 16 of this Safety Data Sheet.

*, ** See Regulation (EC) No. 1272/2008, Annex VI, section 1.2.

[2] Substance with a national workplace exposure limit (see section 8.1).

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SECTION 4: FIRST AID MEASURES.

4.1 Description of first aid measures.

Immediate medical attention is required. Delayed effects may occur after the exposure to the product.

Inhalation.

Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration.

Eye contact.

Remove contact lenses, if present and if it is easy to do. Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance.

Skin contact.

Remove contaminated clothing. Wash skin vigorously with water and soap or a suitable skin cleaner. NEVER use solvents or thinners. The use of personal protective equipment is recommended for people providing first aid (see section 8).

Ingestion.

If accidentally ingested, seek immediate medical attention. Keep calm. NEVER induce vomiting. The use of personal protective equipment is recommended for people providing first aid (see section 8).

In case of inhalation of toxic smoke resulting from detonation or burning, remove the affected area and take you outdoors. Prior to the withdrawal of the affected, make sure the total dissipation of smoke, or, if necessary, appropriate personal protective equipment, (unit autonomous respiratory, mask with its proper filter, etc...).

IMPORTANT: in case of any exposure to these toxic smoke, do need an immediate medical examination. There is a risk of suffering from an edema of lung effect delayed to such exposure

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

Very Toxic Product, accidental contact may result in serious respiratory difficulties, alteration of the central nervous system and in extreme cases, unconsciousness. Immediate medical assistance is required.

Long-term chronic exposure may result in injury to certain organs or tissues.

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

Request immediate medical attention. Never administer anything orally to persons who are unconscious. Do not induce vomiting. If the person vomits, clear the respiratory tract. Keep the person comfortable. Turn him/her over to the left side and stay there while waiting for medical care.

SECTION 5: FIREFIGHTING MEASURES.

5.1 Extinguishing media.

Suitable extinguishing media:

Do not try to extinguish the fire, if the fire has reached the product or if it occurs in the product itself. Evacuate the area immediately keeping people out of the danger zone, as indicated in the corresponding emergency plan.

Unsuitable extinguishing media:

Not applicable. NEVER ATTEMPT TO EXTINGUISH THE FIRE.

5.2 Special hazards arising from the substance or mixture.

Special risks.

During a fire and depending on its magnitude the following may occur:

- Explosions.
- Toxic vapors or gases. Exposure to combustion or decomposition products can be harmful to your health.

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5.3 Advice for firefighters.

Do not try to extinguish the fire. Evacuate the area and follow the instructions described in the emergency and evacuation plan(s).

Fire protection equipment.

See section 5.1 of this Safety Data Sheet.

SECTION 6: ACCIDENTAL RELEASE MEASURES.

6.1 Personal precautions, protective equipment and emergency procedures.

Eliminate possible ignition points and ventilate the area. No smoking. For exposure control and individual protection measures, see section 8.

6.2 Environmental precautions.

Product not classified as hazardous for the environment, avoid spillage as much as possible.

6.3 Methods and material for containment and cleaning up.

Contain and collect spillage with inert absorbent material (earth, sand, vermiculite, Kieselguhr...) and clean the area immediately with a suitable decontaminant.

Deposit waste in closed and suitable containers for disposal, in compliance with local and national regulations (see section 13).

6.4 Reference to other sections.

For exposure control and individual protection measures, see section 8.

For later elimination of waste, follow the recommendations under section 13.

SECTION 7: HANDLING AND STORAGE.

7.1 Precautions for safe handling.

For personal protection, see section 8.

In the application area, smoking, eating, and drinking must be prohibited.

Follow legislation on occupational health and safety.

Never use pressure to empty the containers. They are not pressure-resistant containers. Keep the product in containers made of a material identical to the original.

7.2 Conditions for safe storage, including any incompatibilities.

Store according to local legislation. Observe indications on the label. Store the containers between -10 and 30 °C, in a dry and well-ventilated place, far from sources of heat and direct solar light. Keep far away from ignition points. Keep away from oxidising agents and from highly acidic or alkaline materials. Do not smoke. Prevent the entry of non-authorised persons. Once the containers are open, they must be carefully closed and placed vertically to prevent spills.

Classification and threshold amount of storage in accordance with Annex I to Directive 2012/18/EU (SEVESO III):

Code	Description	Qualifying quantity (tonnes) for the application of	
		Lower-tier requirements	Upper-tier requirements
P1a	EXPLOSIVES	10	50

In products containing nitro ester if the product exudes from its packaging, it is more sensitive. Take extra precautions and warn the manufacturer.

7.3 Specific end use(s).

It is designed as a bottom charge for blasting rocks of medium hardness, and may be used in both interior and open air mining.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

8.1 Control parameters.

Work exposure limit for:

Name	CAS No.	Country	Limit value	ppm	mg/m ³
ethylene dinitrate, ethylene glycol dinitrate	628-96-6	Éire [1]	Eight hours	0,05	0,3
			Short term		
		United States [2] (Cal/OSHA)	Eight hours	0.05 for exposures to mixture of ethylene glycol dinitrate and nitroglycerin	
			Short term		
		United States [3] (NIOSH)	Eight hours		
			Short term		0.1
		United States [4] (OSHA)	Eight hours	(Ceiling) 0.2	(Ceiling) 1
			Short term		

[1] According Code of Practice for the Safety, Health and Welfare at Work (Chemicals Agents) Regulations adopted by Health and Safety Authority (HSA).

[2] California Division of Occupational Safety and Health (Cal/OSHA) Permissible Exposure Limits (PELs).

[3] According Compendium of Policy Documents and Statements adopted by National Institute for Occupational Safety and Health (NIOSH).

[4] According Occupational Health and Safety Standards and US Code of Federal Regulations adopted by US Occupational Safety and Health Administration (OSHA).

The product does NOT contain substances with Biological Limit Values.

Concentration levels DNEL/DMEL:

Name	DNEL/DMEL	Type	Value
ethylene dinitrate, ethylene glycol dinitrate CAS No: 628-96-6 EC No: 211-063-0	DNEL (Workers)	Inhalation, Chronic, Systemic effects	0,085 (mg/m ³)

DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.

DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.

8.2 Exposure controls.

Measures of a technical nature:

Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

Concentration:	100 %
Uses:	Nitroester-based gelatinous explosive that is made from oxidizing salts and fuels and is detonator sensitive, used for civil use in quarries, general mining and public construction work.
Breathing protection:	
If the recommended technical measures are observed, no individual protection equipment is necessary.	
Hand protection:	
PPE:	Protective gloves.
Characteristics:	«CE» marking, category II.



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CEN standards:	EN 374-1, En 374-2, EN 374-3, EN 420		
Maintenance:	Keep in a dry place, away from any sources of heat, and avoid exposure to sunlight as much as possible. Do not make any changes to the gloves that may alter their resistance, or apply paints, solvents or adhesives.		
Observations:	Gloves should be of the appropriate size and fit the user's hand well, not being too loose or too tight. Always use with clean, dry hands.		
Material:	PVC (polyvinyl chloride)	Breakthrough time (min.):	> 480
		Material thickness (mm):	0,35
Eye protection:			
PPE:	Protective goggles against particle impacts.		
Characteristics:	«CE» marking, category II. Eye protector against dust and smoke.		
CEN standards:	EN 165, EN 166, EN 167, EN 168		
Maintenance:	Visibility through lenses should be ideal. Therefore, these parts should be cleaned daily. Protectors should be disinfected periodically following the manufacturer's instructions.		
Observations:	Some signs of wear and tear include: yellow colouring of the lenses, superficial scratching of the lenses, scraping etc.		
Skin protection:			
PPE:	Protective clothing.		
Characteristics:	«CE» marking, category II. Protective clothing should not be too tight or loose in order not to obstruct the user's movements.		
CEN standards:	EN 340		
Maintenance:	In order to guarantee uniform protection, follow the washing and maintenance instructions provided by the manufacturer.		
Observations:	The protective clothing should offer a level of comfort in line with the level of protection provided in terms of the hazard against which it protects, bearing in mind environmental conditions, the user's level of activity and the expected time of use.		
PPE:	Work footwear.		
Characteristics:	«CE» marking, category II.		
CEN standards:	EN ISO 13287, EN 20347		
Maintenance:	This product adapts to the first user's foot shape. That is why, as well as for hygienic reasons, it should not be used by other people.		
Observations:	Work footwear for professional use includes protection elements aimed at protecting users against any injury resulting from an accident		



SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties.

Physical state: Solid

Colour: Blanco o gris

Odour: Typical of nitroesters

Odour threshold: Not applicable/Not available due to the nature/properties of the product

Melting point: Not applicable/Not available due to the nature/properties of the product

Freezing point: Not applicable/Not available due to the nature/properties of the product

Boiling point or initial boiling point and boiling range: Not applicable/Not available due to the nature/properties of the product

Flammability: Not applicable/Not available due to the nature/properties of the product

Lower explosion limit: Not applicable/Not available due to the nature/properties of the product

Upper explosion limit: Not applicable/Not available due to the nature/properties of the product

Flash point: >60 °C

Auto-ignition temperature: Not applicable/Not available due to the nature/properties of the product

Decomposition temperature: > 140 °C

pH: Not applicable/Not available due to the nature/properties of the product

Kinematic viscosity: Not applicable/Not available due to the nature/properties of the product

Solubility: Partially soluble in water and polar solvents

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Hydrosolubility: Partially soluble

Liposolubility: Not applicable/Not available due to the nature/properties of the product

Partition coefficient n-octanol/water (log value): Not applicable/Not available due to the nature/properties of the product

Vapour pressure: Not applicable/Not available due to the nature/properties of the product

Absolute density: Not applicable/Not available due to the nature/properties of the product

Relative density: 1.3 - 1.7

Relative vapour density: Not applicable/Not available due to the nature/properties of the product

Particle characteristics: Not applicable/Not available due to the nature/properties of the product

9.2 Other information

Viscosity: Not applicable/Not available due to the nature/properties of the product

Explosive properties: Yes

Oxidizing properties: Not applicable/Not available due to the nature/properties of the product

Dropping point: Not applicable/Not available due to the nature/properties of the product

Blink: Not applicable/Not available due to the nature/properties of the product

SECTION 10: STABILITY AND REACTIVITY.

10.1 Reactivity.

Explosive; mass explosion hazard.

If the storage conditions are satisfied, does not produce dangerous reactions.

10.2 Chemical stability.

Stable under the recommended handling and storage conditions (see section 7).

10.3 Possibility of hazardous reactions.

May intensify fire; oxidiser.

It can cause excessive pressure.

10.4 Conditions to avoid.

Avoid the following conditions:

- Heating.
- High temperature.
- Excess pressure.
- Shocks.
- Friction.
- Static discharge.
- Vibrations.
- Contact with incompatible materials.

10.5 Incompatible materials.

Avoid the following materials:

- Flammable materials.
- Explosives materials.
- Toxic materials.
- Oxidizing materials.
- Corrosive materials.

10.6 Hazardous decomposition products.

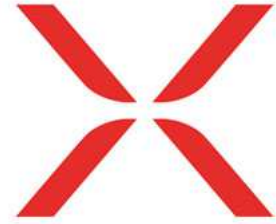
Depending on conditions of use, can be generated the following products:

- CO_x (carbon oxides).
- NO_x (nitrogen oxides).
- Oxygen.
- Oxidizing gases or vapors.

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SECTION 11: TOXICOLOGICAL INFORMATION.

11.1 Information on hazard classes as defined in Regulation (EC) N° 1272/2008.

There are no tested data available on the product.

a) acute toxicity;

Product classified:

Acute toxicity (Dermal), Category 1: Fatal in contact with skin.

Acute toxicity (Oral), Category 2: Fatal if swallowed.

Acute Toxicity Estimate (ATE):

Mixtures:

ATE (Dermal) = 17 mg/kg

ATE (Oral) = 17 mg/kg

b) skin corrosion/irritation;

Not conclusive data for classification.

c) serious eye damage/irritation;

Not conclusive data for classification.

d) respiratory or skin sensitisation;

Not conclusive data for classification.

e) germ cell mutagenicity;

Not conclusive data for classification.

f) carcinogenicity;

Not conclusive data for classification.

g) reproductive toxicity;

Not conclusive data for classification.

h) STOT-single exposure;

Not conclusive data for classification.

i) STOT-repeated exposure;

Product classified:

Specific target organ toxicity following a repeated exposure, Category 2: May cause damage to organs through prolonged or repeated exposure.

j) aspiration hazard;

Not conclusive data for classification.

11.2 Information on other hazards.

Endocrine disrupting properties

This product does not contain components with endocrine-disrupting properties with effects on human health.

Other information

There is no information available on other adverse health effects.

SECTION 12: ECOLOGICAL INFORMATION.

12.1 Toxicity.

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No information is available regarding the ecotoxicity of the substances present.

12.2 Persistence and degradability.

No information is available regarding the biodegradability of the substances present.

No information is available on the degradability of the substances present.

No information is available about persistence and degradability of the product.

12.3 Bioaccumulative potential.

No information is available regarding the bioaccumulation of the substances present.

12.4 Mobility in soil.

No information is available about the mobility in soil.

The product must not be allowed to go into sewers or waterways.

Prevent penetration into the ground.

12.5 Results of PBT and vPvB assessment.

No information is available about the results of PBT and vPvB assessment of the product.

12.6 Endocrine disrupting properties.

This product doesn't contain components with environmental endocrine disrupting properties.

12.7 Other adverse effects.

No information is available about other adverse effects for the environment.

SECTION 13: DISPOSAL CONSIDERATIONS.

Destruction of explosives should be carried out by specialised personnel, using controlled processes and installations authorised by the competent bodies. Consult your manufacturer and/or distributor.

13.1 Waste treatment methods.

Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.

Follow the provisions of Directive 2008/98/EC regarding waste management.

SECTION 14: TRANSPORT INFORMATION.

Transport following ADR rules for road transport, RID rules for railway, ADN for inner waterways, IMDG for sea, and ICAO/IATA for air transport.

Land: Transport by road: ADR, Transport by rail: RID.

Transport documentation: Consignment note and written instructions

Sea: Transport by ship: IMDG.

Transport documentation: Bill of lading

Air: Transport by plane: ICAO/IATA.

Transport document: Airway bill.

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14.1 UN number or ID number.

UN No: UN0081

14.2 UN proper shipping name.

Description:

ADR/RID: UN 0081, EXPLOSIVE, BLASTING, TYPE A, 1.1D, (B1000C)

IMDG: UN 0081, EXPLOSIVE, BLASTING, TYPE A, 1.1D (60°C)

ICAO/IATA: PROHIBITED

14.3 Transport hazard class(es).

Class(es): 1

14.4 Packing group.

Packing group: Not applicable.

14.5 Environmental hazards.

Marine pollutant: No

Transport by ship, FEM – Emergency sheets (F – Fire, S - Spills): F-B,S-Y

14.6 Special precautions for user.

Labels: 1



Hazard number: Not applicable.

ADR LQ: 0

IMDG LQ: 0

ICAO LQ: Not applicable.

Provisions concerning carriage in bulk ADR: Not authorized carriage in bulk in accordance with ADR.

Proceed in accordance with point 6.

14.7 Maritime transport in bulk according to IMO instruments.

The product is not transported in bulk.

SECTION 15: REGULATORY INFORMATION.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.

The product is not affected by the Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

Volatile organic compound (VOC)

VOC content (p/p): 28,9 %

VOC content: 375,7 g/l

Product classification according to Annex I of Directive 2012/18/EU (SEVESO III): P1a

The product is not affected by Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.

The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals.

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Restrictions on the manufacturing, placing on the market and use of certain dangerous substances, mixtures and articles:

Designation of the substance, of the group of substances or of the mixture	Conditions of restriction
58. Ammonium nitrate (AN) CAS No 6484-52-2 EC No 229-347-8	<p>1. Shall not be placed on the market for the first time after 27 June 2010 as a substance, or in mixtures that contain more than 28 % by weight of nitrogen in relation to ammonium nitrate, for use as a solid fertiliser, straight or compound, unless the fertiliser complies with the technical provisions for ammonium nitrate fertilisers of high nitrogen content set out in Annex III to Regulation (EC) No 2003/2003 of the European Parliament and of the Council (10).</p> <p>2. Shall not be placed on the market after 27 June 2010 as a substance, or in mixtures that contain 16 % or more by weight of nitrogen in relation to ammonium nitrate except for supply to:</p> <p>(a) downstream users and distributors, including natural or legal persons licensed or authorised in accordance with Council Directive 93/15/EEC (11);</p> <p>(b) farmers for use in agricultural activities, either full time or part time and not necessarily related to the size of the land area.</p> <p>For the purposes of this subparagraph:</p> <p>(i) 'farmer' shall mean a natural or legal person, or a group of natural or legal persons, whatever legal status is granted to the group and its members by national law, whose holding is situated within Community territory, as referred to in Article 299 of the Treaty, and who exercises an agricultural activity;</p> <p>(ii) 'agricultural activity' shall mean the production, rearing or growing of agricultural products including harvesting, milking, breeding animals and keeping animals for farming purposes, or maintaining the land in good agricultural and environmental condition as established under Article 5 of Council Regulation (EC) No 1782/2003 (12);</p> <p>(c) natural or legal persons engaged in professional activities such as horticulture, plant growing in greenhouses, maintenance of parks, gardens or sport pitches, forestry or other similar activities.</p> <p>3. However, for the restrictions in paragraph 2, Member States may until 1 July 2014, for socioeconomic reasons, apply a limit of up to 20 % by weight of nitrogen in relation to ammonium nitrate for substances and mixtures placed on the market within their territories. They shall inform the Commission and other Member States thereof.</p>

15.2 Chemical safety assessment.

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION.

Complete text of the H phrases that appear in section 3:

H200	Unstable explosives.
H300	Fatal if swallowed.
H310	Fatal in contact with skin.
H330	Fatal if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.

Classification codes:

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Acute Tox. 1 : Acute toxicity (Dermal), Category 1
Acute Tox. 2 : Acute toxicity (Inhalation), Category 2
Acute Tox. 2 : Acute toxicity (Oral), Category 2
Expl. 1.1 : Explosive Division 1.1
Ox. Sol. 3 : Oxidising solid, Category 3
STOT RE 2 : Specific target organ toxicity following a repeated exposure, Category 2
Unst. Expl. : Unstable Explosive

Changes regarding to the previous version:

- Modification of specific hazards (SECTION 2.3).
- Changes in the composition of the product (SECTION 3.2).
- Modification in the firefighting measures (SECTION 5.1).
- Modification in the firefighting measures (SECTION 5.2).
- Modification in the firefighting measures (SECTION 5.3).
- Modifications in the accidental release measures (SECTION 6.1).
- Modification of exposure data (SECTION 8.1).
- Modification in the values of the physical and chemical properties (SECTION 9).
- Change in the hazard classification (SECTION 11.1).
- Modification of the classification ADR/IMDG/ICAO/IATA/RID (SECTION 14).
- National legislative changes (SECTION 15.1).
- Addition of abbreviations and acronyms (SECTION 16).

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Physical hazards	On basis of test data
Health hazards	Calculation method
Environmental hazards	Calculation method

It is advisable to carry out basic training with regard to health and safety at work in order to handle this product correctly.

Abbreviations and acronyms used:

ADR/RID: European Agreement concerning the International Carriage of Dangerous Goods by Road.

CEN: European Committee for Standardization.

DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.

DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.

PPE: Personal protection equipment.

IATA: International Air Transport Association.

ICAO: International Civil Aviation Organization.

IMDG: International Maritime Code for Dangerous Goods.

RID: Regulations Concerning the International Transport of Dangerous Goods by Rail.

Key literature references and sources for data:

<http://eur-lex.europa.eu/homepage.html>

<http://echa.europa.eu/>

Regulation (EU) 2020/878.

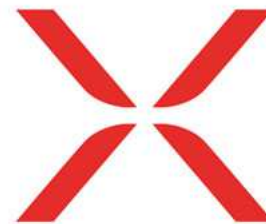
Regulation (EC) No 1907/2006.

Regulation (EU) No 1272/2008.

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SAFETY DATA SHEET

(in accordance with Regulation (EU) 2020/878)



RIODIN HE - RIODIN XE

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The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemical substances and mixtures (REACH).

The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.