

RHODUNA® Diamond Bright Additive Solution

Version 6.0

US

SDS Number: 300000002561

Revision Date: 08/24/2022

SECTION 1. IDENTIFICATION

Product name : RHODUNA® Diamond Bright Additive Solution
Material number : 000000574121000211
Product code : 300000002561

Manufacturer or supplier's details

Company name of supplier : Umicore Galvanotechnik GmbH
Address : Klarenbergstraße 53-79
73525 Schwäbisch Gmünd
Germany
Telephone : +49 (0)7171 607-01
Telefax : +497171607316
E-mail address of person responsible for the SDS : galvano@eu.umicore.com

Poison Center

Telephone : +1 800 222 1222
Hours of operation : 24HRS

Supplier

Emergency telephone number : For transport in Europe, Central- and South America, Israel and Africa (Non-Arabic speaking countries):(+32) 3 213 15 70
For transport in the Middle East (Israel excluded) & Arabic speaking Africa:(+32) 3 213 33 79
For transport in the USA and Canada:(+1)-877 986 4267
For transport in Asian and the Pacific (China excluded):(+65) 62 64 78 36
For transport in China:(+86) 0532 8388 9090

Hours of operation : This telephone number is available 24 hours per day, 7 days per week.

Recommended use of the chemical and restrictions on use

Recommended use : Electroplating.

SECTION 2. HAZARDS IDENTIFICATION**GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)**

Eye irritation : Category 2A

RHODUNA® Diamond Bright Additive Solution

Version 6.0

US

SDS Number: 300000002561

Revision Date: 08/24/2022

GHS label elements

Hazard pictograms

:



Signal word

: Warning

Hazard statements

: H319 Causes serious eye irritation.

Precautionary statements

: **Prevention:**

P264 Wash skin thoroughly after handling.
P280 Wear eye protection/ face protection.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/ attention.

Additional Labelling

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity: 5 %
The following percentage of the mixture consists of ingredient(s) with unknown hazards to the aquatic environment: 1.5 %

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
sodium dodecyl sulphate	151-21-3	<= 3.5
sodium hydrogensulphate	7681-38-1	<= 1.5

SECTION 4. FIRST AID MEASURES

General advice

: Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

If inhaled

: If unconscious, place in recovery position and get medical attention immediately.

In case of skin contact

: If on skin, rinse well with water.
If on clothes, remove clothes.
If skin irritation persists, call a physician.
Wash contaminated clothing before reuse.

RHODUNA® Diamond Bright Additive Solution

Version 6.0

US

SDS Number: 300000002561

Revision Date: 08/24/2022

- In case of eye contact : Remove contact lenses.
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Protect unharmed eye.
Keep eye wide open while rinsing.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.
Keep respiratory tract clear.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : Skin contact may provoke the following symptoms:
Redness
In case of eye contact
Excessive lachrymation

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during fire-fighting : Cool closed containers exposed to fire with water spray.
In the presence of fire, note caustic and corrosive effect.
- Hazardous combustion products : Hazardous decomposition products due to incomplete combustion
Sulphuric acid
- Further information : Standard procedure for chemical fires.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Special protective equipment for firefighters : No special protective equipment required.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
- Environmental precautions : Prevent further leakage or spillage if safe to do so.
- Methods and materials for containment and cleaning up : Neutralize with chalk, alkali solution or ammonia.
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

SECTION 7. HANDLING AND STORAGE

RHODUNA® Diamond Bright Additive Solution

Version 6.0

US

SDS Number: 300000002561

Revision Date: 08/24/2022

- Advice on protection against fire and explosion : Normal measures for preventive fire protection.
- Advice on safe handling : Do not breathe vapours/dust.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Electrical installations / working materials must comply with the technological safety standards.
To maintain product quality, do not store in heat or direct sunlight.
- Further information on storage stability : Keep in a dry place.
No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

- Engineering measures** : Handle only in a place equipped with local exhaust (or other appropriate exhaust).

Personal protective equipment

Hand protection

- Material : Nitrile rubber
Break through time : > 30 min
Glove thickness : 0.40 mm

- Eye protection : Wear safety glasses with side shields or goggles.

- Skin and body protection : Footwear protecting against chemicals

- Hygiene measures : General industrial hygiene practice.
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Colour : light yellow
- Odour : characteristic
- pH : ca. 3.1
Concentration: 100 %

RHODUNA® Diamond Bright Additive Solution

Version 6.0

US

SDS Number: 300000002561

Revision Date: 08/24/2022

Melting point/freezing point	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	does not flash
Flammability (liquids)	:	Does not sustain combustion.
Vapour pressure	:	not determined
Density	:	ca. 1.00 g/cm ³
Solubility(ies)	:	
Water solubility	:	completely miscible
Partition coefficient: n-octanol/water	:	No data available
Auto-ignition temperature	:	not determined
Viscosity	:	
Viscosity, kinematic	:	No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Stable at normal ambient temperature and pressure.
Chemical stability	:	No decomposition if stored and applied as directed.
Possibility of hazardous reactions	:	Stable under recommended storage conditions.
Conditions to avoid	:	Extremes of temperature and direct sunlight.
Hazardous decomposition products	:	No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity****Product:**

Acute oral toxicity	:	Acute toxicity estimate: > 5,000 mg/kg Method: Calculation method
Acute inhalation toxicity	:	Remarks: No data available
Acute dermal toxicity	:	Remarks: No data available

Components:**sodium dodecyl sulphate:**

RHODUNA® Diamond Bright Additive Solution

Version 6.0

US

SDS Number: 300000002561

Revision Date: 08/24/2022

- Acute oral toxicity : LD50 (Rat, male and female): 1,200 mg/kg
Method: OECD Test Guideline 401
GLP: no
- Acute inhalation toxicity : Assessment: No data available
Remarks: data waiving in REACH dossier
- Acute dermal toxicity : LD50 Dermal (Rat, male and female): > 5,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes

sodium hydrogensulphate:

- Acute oral toxicity : Assessment: No data available
Remarks: data waiving in REACH dossier
- Acute inhalation toxicity : Assessment: No data available
Remarks: data waiving in REACH dossier
- Acute dermal toxicity : Assessment: No data available
Remarks: data waiving in REACH dossier

Skin corrosion/irritation**Components:****sodium dodecyl sulphate:**

- Species : Rabbit
Exposure time : 24 h
Result : Skin irritation

Serious eye damage/eye irritation**Components:****sodium dodecyl sulphate:**

- Species : Rabbit
Result : Corrosive

sodium hydrogensulphate:

- Result : Irreversible effects on the eye

Respiratory or skin sensitisation**Product:**

- Remarks : No data available

Germ cell mutagenicity**Product:**

- Genotoxicity in vitro : Remarks: No data available

RHODUNA® Diamond Bright Additive Solution

Version 6.0

US

SDS Number: 300000002561

Revision Date: 08/24/2022

Carcinogenicity**Product:**

Remarks : No data available

IARC No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.**OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.**NTP** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.**Reproductive toxicity****Product:**

Effects on fertility : Remarks: No data available

STOT - single exposure**Product:**

Remarks : No data available

STOT - repeated exposure**Product:**

Remarks : No data available

Further information**Product:**

Remarks : No data available

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Components:****sodium dodecyl sulphate:**Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 29 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
GLP: no
Remarks: Fresh waterToxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): > 120 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
GLP: yes
Remarks: Fresh water

RHODUNA® Diamond Bright Additive Solution

Version 6.0

US

SDS Number: 300000002561

Revision Date: 08/24/2022

sodium hydrogensulphate:**Ecotoxicology Assessment**

Acute aquatic toxicity : No data available

Persistence and degradability

No data available

Bioaccumulative potential**Components:****sodium dodecyl sulphate:**Partition coefficient: n- : log Pow: -2.03
octanol/water**Mobility in soil**

No data available

Other adverse effects**Product:**Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : No data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**Waste from residues : Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.
Dispose of as hazardous waste in compliance with local and national regulations.Contaminated packaging : Empty remaining contents.
Dispose of contaminated packaging as if unused product.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION**International Regulations****UNRTDG**

RHODUNA® Diamond Bright Additive Solution

Version 6.0

US

SDS Number: 300000002561

Revision Date: 08/24/2022

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations**49 CFR**

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION**CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Serious eye damage or eye irritation

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

US State Regulations**Massachusetts Right To Know**

No components are subject to the Massachusetts Right to Know Act.

RHODUNA® Diamond Bright Additive Solution

Version 6.0

US

SDS Number: 300000002561

Revision Date: 08/24/2022

Pennsylvania Right To Know

water	7732-18-5
sodium dodecyl sulphate	151-21-3

Maine Chemicals of High Concern

This product does not contain any chemicals that are listed as Maine Chemicals of High Concern.

Maine Chemicals of High Concern

Product does not contain any listed chemicals

Vermont Chemicals of High Concern

Product does not contain any listed chemicals

Washington Chemicals of High Concern

Product does not contain any listed chemicals

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:

TSCA	: All substances listed as active on the TSCA inventory
AIC	: On the inventory, or in compliance with the inventory
DSL	: All components of this product are on the Canadian DSL
ENCS	: On the inventory, or in compliance with the inventory
ISHL	: On the inventory, or in compliance with the inventory
KECI	: On the inventory, or in compliance with the inventory
PICCS	: On the inventory, or in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory
NZIoC	: Not in compliance with the inventory
CH INV	: On the inventory, or in compliance with the inventory
TCSI	: On the inventory, or in compliance with the inventory
TECI	: On the inventory, or in compliance with the inventory

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

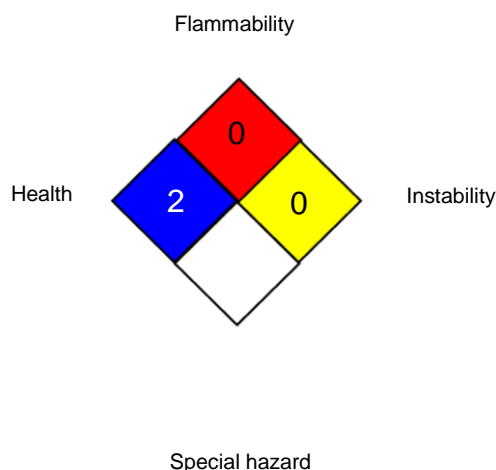
RHODUNA® Diamond Bright Additive Solution

Version 6.0

US

SDS Number: 300000002561

Revision Date: 08/24/2022

SECTION 16. OTHER INFORMATION
Further information
NFPA 704:

HMIS® IV:

HEALTH	/	2
FLAMMABILITY		0
PHYSICAL HAZARD		0

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund

RHODUNA® Diamond Bright Additive Solution

Version 6.0

US

SDS Number: 300000002561

Revision Date: 08/24/2022

Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 08/24/2022

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

US / EN