

# SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

**Product name** : LUMINA®RYL BL 9680H

**Trade name** : Lumina® Royal  
Blue 9680H

**Product code** : HE9680H

**Date of issue/Date of revision** : 02 February 2023

**Version** : 1.01

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

#### Identified uses

Intermediate  
pigment preparation  
Colorants for industrial use  
cosmetic ingredient  
Pharmaceutical, food and cosmetic industry  
PIGMENT  
pigments

#### Uses advised against

Not applicable.

### 1.3 Details of the supplier of the safety data sheet

**Manufacturer/ Distributor** : Sun Chemical Colors & Effects GmbH  
An der Rheinschanze 1  
67059 Ludwigshafen, Germany  
Tel: +49 621 4818 2319  
 Sun Chemical Limited  
3 High View Road, South Normanton  
Derbyshire, DE55 2DT, United Kingdom

**e-mail address of person responsible for this SDS** : pigments-safety@sunchemical.com

### 1.4 Emergency telephone number

#### National advisory body/Poison Centre

**Telephone number** : UK NPIS 0344 892 0111  
NHS 111 in England: 111  
NHS 24 in Scotland: 111  
NHS Direct in Wales: 111 or 0845 4647

#### Supplier

**Telephone number** : (44) 870-8200418 (Chemtrec – 24 hours)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

See Section 11 for more detailed information on health effects and symptoms.

### 2.2 Label elements

## SECTION 2: Hazards identification

<b>Signal word</b>	: No signal word.
<b>Hazard statements</b>	: No known significant effects or critical hazards.
<b>Precautionary statements</b>	
<b>Prevention</b>	: Not applicable.
<b>Response</b>	: Not applicable.
<b>Storage</b>	: Not applicable.
<b>Disposal</b>	: Not applicable.
<b>Supplemental label elements</b>	: Safety data sheet available on request. Warning! Hazardous respirable dust may be formed when used. Do not breathe dust.
<b>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</b>	: Not applicable.

### 2.3 Other hazards

<b>Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII</b>	: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
<b>Other hazards which do not result in classification</b>	: None known.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
tin dioxide	REACH #: 01-2119946062-44 EC: 242-159-0 CAS: 18282-10-5	1,0 < 2,5	Not classified.  <b>See Section 16 for the full text of the H statements declared above.</b>	-	[1]

This mixture contains  $\geq 1\%$  titanium dioxide.

The classification according to CLP regulation (EU) 1272/2008 annex VI note 10 does not apply to this mixture.

#### Type

[1] Substance with a workplace exposure limit  
Occupational exposure limits, if available, are listed in Section 8.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

<b>General</b>	: In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
<b>Eye contact</b>	: Remove contact lenses, if present and easy to do. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open.
<b>Inhalation</b>	: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

## SECTION 4: First aid measures

- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

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

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

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

**Notes to medical doctor** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments** : No specific treatment.

See toxicological information (Section 11)

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

**Unsuitable extinguishing media** : Do not use water jet.

### 5.2 Special hazards arising from the substance or mixture

**Hazards from the substance or mixture** : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

**Hazardous combustion products** : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

### 5.3 Advice for firefighters

**Special protective actions for fire-fighters** : Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.

**Special protective equipment for fire-fighters** : Appropriate breathing apparatus may be required.

**Additional information** : not explosive

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : Avoid breathing dust. Refer to protective measures listed in sections 7 and 8.

**For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**6.2 Environmental precautions** : Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

**6.3 Methods and material for containment and cleaning up** : Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Preferably clean with a detergent. Avoid using solvents.

**6.4 Reference to other sections** : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

- Protective measures** : Avoid breathing dust. Put on appropriate personal protective equipment (see Section 8). Comply with the health and safety at work laws.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

### 7.2 Conditions for safe storage, including any incompatibilities

- : Store in accordance with local regulations. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep container tightly closed. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Use appropriate containment to avoid environmental contamination. Do not reuse container. See Section 10 for incompatible materials before handling or use.
- not flammable

### 7.3 Specific end use(s)

- Recommendations** : For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.
- Industrial sector specific solutions** : Not available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
tin dioxide	<b>EU OEL (Europe, 2/2017). Notes: list of indicative occupational exposure limit values</b> TWA: 2 mg/m <sup>3</sup> , ((as Sn)) 8 hours.

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
tin dioxide	DNEL	Long term Inhalation	2 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Short term Inhalation	2 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	5.7 mg/kg	Workers	Systemic
	DNEL	Short term Dermal	5.7 mg/kg	Workers	Systemic
	DNEL	Long term Inhalation	6 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Short term Inhalation	6 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Oral	2 mg/kg	General population	Systemic
	DNEL	Short term Oral	2 mg/kg	General	Systemic

## SECTION 8: Exposure controls/personal protection

	DNEL	Long term Dermal	2 mg/kg	population General population	Systemic
	DNEL	Short term Dermal	2 mg/kg	General population	Systemic

### PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
tin dioxide	Fresh water	0.1 mg/l	-
	Marine water	0.01 mg/l	-
	Sewage Treatment Plant	100 mg/l	-
	Intermittent release	1 mg/l	-

### 8.2 Exposure controls

**Appropriate engineering controls** : Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.

#### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

**Eye/face protection** : Safety eyewear should be used when there is a likelihood of exposure. Use eye protection according to EN 166.

#### Skin protection

**Hand protection** : Wear suitable gloves tested to EN374. There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

**Gloves** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

**Body protection** : Personnel should wear antistatic clothing made of natural fibres or of high-temperature-resistant synthetic fibres.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.

**Environmental exposure controls** : Do not allow to enter drains or watercourses.

## SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### 9.1 Information on basic physical and chemical properties

#### Appearance

**Physical state** : Solid. [Powder. ]

**Colour** : Blue.

**Odour** : Odourless.

**Odour threshold** : Not applicable.

## SECTION 9: Physical and chemical properties

<b>Melting point/freezing point</b>	: >1200°C
<b>Initial boiling point and boiling range</b>	: Not applicable
<b>Flammability</b>	: not flammable
<b>Lower and upper explosion limit</b>	: Not available.
<b>Flash point</b>	: Not applicable.
<b>Auto-ignition temperature</b>	: Not applicable.
<b>Decomposition temperature</b>	: Not applicable.
<b>pH</b>	: 7 to 10 [Conc. (% w/w): 4%]
<b>Viscosity</b>	: Absolute Viscosity (room temperature) (cP):: Not applicable.
<b>Solubility(ies)</b>	:

Media	Result
cold water	Not soluble
hot water	Not soluble

<b>Solubility in water</b>	: Not available.
<b>Partition coefficient: n-octanol/ water</b>	: Not applicable.
<b>Evaporation rate</b>	: Not tested
<b>Relative density</b>	: 2.8 to 3
<b>Density</b>	: 2.8 to 3 g/cm <sup>3</sup> at 20°C
<b>Vapour density</b>	: Not tested
<b>Bulk density</b>	: 0,24 - 0,28 kg/l
<b>Explosive properties</b>	: not explosive
<b>Oxidising properties</b>	: Not applicable.

### 9.2 Other information

<b>Self heating ability</b>	: It is not a substance capable of spontaneous heating.
<b>VOC content</b>	: Not applicable.

## SECTION 10: Stability and reactivity

<b>10.1 Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>10.2 Chemical stability</b>	: Stable under recommended storage and handling conditions (see Section 7).
<b>10.3 Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>10.4 Conditions to avoid</b>	: When exposed to high temperatures may produce hazardous decomposition products.
<b>10.5 Incompatible materials</b>	: Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.
<b>10.6 Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

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

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

#### Acute toxicity

**SECTION 11: Toxicological information**

Product/ingredient name	Result	Species	Dose	Exposure
UMINA@RYL BL 9680H tin dioxide	LD50 Oral LD50 Oral	Rat Rat	>5000 mg/kg >20 g/kg	- -

Virtually nontoxic after a single ingestion. The product has not been tested. The statement has been derived from the properties of the individual components.

**Acute toxicity estimates**

N/A

**Irritation/Corrosion**

Product/ingredient name	Result	Species	Exposure	Observation
UMINA@RYL BL 9680H	Eyes - non-irritant Skin - non-irritant	Rabbit Rabbit	0 0	- -

**Skin** : The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

**Eyes** : The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

**Respiratory** : Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

**Sensitisation**

Product/ingredient name	Route of exposure	Species	Result
UMINA@RYL BL 9680H	skin	Guinea pig	Not sensitizing

**Skin** : The chemical structure does not suggest a sensitizing effect. The product has not been tested. The statement has been derived from the properties of the individual components.

**Respiratory** : Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

**Mutagenicity**

No data was available concerning mutagenic activity. The chemical structure does not suggest a specific alert for such an effect.

**Carcinogenicity**

This mixture contains  $\geq 1\%$  titanium dioxide.

The classification according to CLP regulation (EU) 1272/2008 annex VI note 10 does not apply to this mixture.

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

**Reproductive toxicity**

No reliable data are available concerning reproduction toxicity. Based on the ingredients, there is no suspicion of a toxic effect on reproduction.

**Teratogenicity**

No reliable data was available concerning teratogenicity. Based on the ingredients, there is no suspicion of a teratogenic effect.

**Specific target organ toxicity (single exposure)**

Not available.

**Specific target organ toxicity (repeated exposure)**

Not available.

**Aspiration hazard**

Not available.

**11.2 Information on other hazards****11.2.1 Endocrine disrupting properties**

Not available.

**11.2.2 Other information**

Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

Do not allow to enter drains or watercourses.

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Product/ingredient name	Result	Species	Exposure
UMINA@RYL BL 9680H	Acute LC50 >100 mg/l	Fish	96 hours

The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations. At the present state of knowledge, no negative ecological effects are expected. The product has not been tested. The statement has been derived from the properties of the individual components.

### 12.2 Persistence and degradability

The colourant is insoluble in water and can thus be separated from water mechanically in suitable effluent treatment plant

### 12.3 Bioaccumulative potential

Not available.

### 12.4 Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Mobility** : Not available.

### 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

### 12.6 Endocrine disrupting properties

Not available.

### 12.7 Other adverse effects

No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**Disposal considerations** : Do not allow to enter drains or watercourses. Dispose of according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

#### European waste catalogue (EWC)

Not available.

#### Packaging

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Disposal considerations** : Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Dispose of containers contaminated by the product in accordance with local or national legal provisions.



## SECTION 13: Disposal considerations

**Special precautions** : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	-	-	-	-
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.

**14.6 Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**14.7 Maritime transport in bulk according to IMO instruments** : Not available.

## SECTION 15: Regulatory information

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

### EU Regulation (EC) No. 1907/2006 (REACH)

#### Annex XIV - List of substances subject to authorisation

##### Annex XIV

None of the components are listed.

##### Substances of very high concern

None of the components are listed.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.

#### Other EU regulations

**VOC content** : Not applicable.

#### Ozone depleting substances (1005/2009/EU)

Not listed.

#### Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

#### Persistent Organic Pollutants

Not listed.

#### Seveso Directive

This product is not controlled under the Seveso Directive.

## SECTION 15: Regulatory information

### National regulations

**Industrial use** : The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

### Inventory list

**Australia inventory (AIC)**: All components are listed or exempted.

**Canada inventory**: All components are listed or exempted.

**China inventory (IECSC)**: All components are listed or exempted.

**Japan inventory (CSCL)**: All components are listed or exempted.

**Korea inventory (KECI)**: All components are listed or exempted. / All components of this product are exempted and not subject to registration.

**New Zealand Inventory of Chemicals (NZIoC)**: All components are listed or exempted.

**Philippines inventory (PICCS)**: All components are listed or exempted.

**Taiwan Chemical Substances Inventory (TCSI)**: All components are listed or exempted. / Please contact your local supplier.

**Turkey inventory**: All components are listed or exempted.

**United States inventory (TSCA 8b)**: Exempt or listed on the active inventory.

**Europe inventory** : Please contact your supplier to get the information.

### 15.2 Chemical safety assessment

Chemical Safety Assessment not required

## SECTION 16: Other information

**CEPE code** : 8

☑ Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** : ATE = Acute Toxicity Estimate  
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]  
 DMEL = Derived Minimal Effect Level  
 DNEL = Derived No Effect Level  
 EUH statement = CLP-specific Hazard statement  
 N/A = Not available  
 PBT = Persistent, Bioaccumulative and Toxic  
 PNEC = Predicted No Effect Concentration  
 RRN = REACH Registration Number  
 SGG = Segregation Group  
 vPvB = Very Persistent and Very Bioaccumulative

### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

### Full text of abbreviated H statements

Not applicable.

### Full text of classifications [CLP/GHS]

Not applicable.

**Date of printing** : 26 April 2023

**Date of issue/Date of revision** : 02 February 2023

**Date of previous issue** : 02 January 2023

**Version** : 1.01

**Previous version (REACH Annex II 2015/830)** : 1.03

### Notice to reader

**SECTION 16: Other information**

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.

HE9680H