Version: 1



SAFETY DATA SHEET

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

1.1. <u>Product identifier:</u>

LUXART SENA GREEN

LUXART VINTAGE GREEN

LUXART EMERALD GREEN

LUXART PETROL GREEN

LUXART SARDIC TURQUOISE

LUXART MUSCAT BROWN

LUXART LUCID ROSE

LUXART RASPBERRY

LUXART METRO BLUE

LUXART SIAM RED

LUXART SILK CORAL

LUXART TOSCA ORANGE

LUXART SUN YELLOW

LUXART CORA GREY

LUXART NORDIC WHITE

LUXART SONOS BLACK

1.2. Relevant identified uses of the mixture and uses advised against:

Coating for jewellery or watch components.

For professional use.

1.3. <u>Details of the supplier of the safety data sheet:</u>

Information about the manufacturer:

INVICON CHEMICAL SOLUTIONS GMBH

Schweizerstrasse 96 A-6830 Rankweil Tel: +43 5522 45301

1.3.1. Responsible person: Peter Bubendorfer

E-mail: <u>p.bubendorfer@invicon.at</u>

1.4. Emergency telephone number: Please fill in

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the mixture:

Classification according to Regulation 1272/2008/EC (CLP): Skin corrosion/irritation, Hazard Category 2 – H315 Serious eye damage/eye irritation, Hazard Category 2 – H319

Warning ${\bf H}$ statements:

H315 – Causes skin irritation.

H319 – Causes serious eye irritation.

Date of revision: -



Label elements: 2.2.



Warning H statements:

H315 - Causes skin irritation.

H319 – Causes serious eye irritation.

EUH 204 – Contains isocyanates. May produce an allergic reaction.

Precautionary P statements:

P264 – Wash hands thoroughly after handling.

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

P302 + P352 - IF ON SKIN: Wash with plenty of water.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332 + **P313** – If skin irritation occurs: Get medical advice/attention.

P337 + P313 – If eye irritation persists: Get medical advice/attention.

Other hazards: 2.3.

The product has no other known specific hazards for human or environment.

Results of PBT and vPvB assessment: no data available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances: 3.1.

Not applicable.

3.2. Mixtures:

Description: Mixture of the materials listed below with other substances not classified as dangerous and different pigments. The pigments are not considered as hazardous, or their concentrations do not reach the extent stated in the relevant regulations, therefore it is not necessary to indicate them in the safety data sheet.

Description	CAS number	EC number/ ECHA list number	REACH registration number	Conc. (%)	Classification according to Regulation 1272/2008/EC (CLP)		
Description					Hazard pictogram	Hazard category	H phrase
Poly(oxy-1,2- ethanediyl), .alpha.,.alpha.'-[(1- methylethylidene)di- 4,1-phenylene]bis [.omega[(2-methyl-1- oxo-2-propen-1- yl)oxy]-*	41637-38-1	609-946-4	-	12,6	GHS07 Warning	Skin Irrit. 2 Eye Irrit. 2	H315 H319
2-(2H-benzotriazol-2- yl)-p-cresol*	2440-22-4	219-470-5	-	0,03	GHS07 Warning	Skin Sens. 1 Aquatic chronic 4	H317 H413
Ethyl phenyl(2,4,6- trimethylbenzoyl) phosphinate*	84434-11-7	282-810-6	-	0,1	-	Aquatic Chronic 3	H412
Aliphatic urethane dimethacrylate*/**	confidential	confidential	-	49,31	-	not classified	-

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*: Classification specified by the manufacturer; the substance is not listed in Annex VI of the Regulation (EC) No. 1272/2008.

It does not contain any other substance considered to be hazardous to health or to the environment, or which have a PBT, vPvB or workplace exposure limit value or its concentration does not reach the level specified in the relevant legislation and therefore it does not need to be included in the safety data sheet.

For the full text of H phrases: see section 16.

SECTION 4: FIRST AID MEASURES

4.1. <u>Description of first aid measures:</u>

General information: Remove contaminated or saturated clothing immediately and dispose of safely.

INGESTION:

Measures:

- Rinse mouth with water.
 - Give the victim plenty of water to drink.
- Obtain immediate medical attention.

INHALATION:

Measures:

- Take the victim into fresh air, loosen his clothes and let him rest.
- In case of complaints, obtain medical help.

SKIN CONTACT:

Measures:

- Remove the contaminated clothes and shoes.
- Wash the skin surface immediately with plenty of water and soap.
- If skin irritation persists, obtain medical help.

EYE CONTACT:

Measures:

- In case of contact with eyes flush with water holding eyelids apart and moving the eyeballs.
- If eye irritation persists, consult a specialist.

4.2. <u>Most important symptoms and effects, both acute and delayed:</u>

Causes skin irritation.

Causes serious eye irritation.

Contains isocyanates. May produce an allergic reaction.

4.3. <u>Indication of any immediate medical attention and special treatment needed:</u>

No special treatment needed; treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media:

5.1.1. Suitable extinguishing media:

Water fog, foam, dry chemical, carbon dioxide.

Choose extinguishing media depending on surrounding fire.

5.1.2. Unsuitable extinguishing media:

None known.

5.2. <u>Special hazards arising from the substance or mixture:</u>

The formation of dangerous decomposition products greatly depends on the circumstances of the combustion. A complex mixture of airborne solid, liquid and gas substances may occur, such as carbon monoxide, carbon dioxide and unidentified compounds.

The inhalation of such combustion products can have serious adverse effects on health.

5.3. Advice for firefighters:

Wear full protective clothing and self-contained breathing apparatus.

^{**:} contains isocyanates

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:

6.1.1. For non-emergency personnel:

Allow only well-trained experts wearing suitable protective clothing to abide in the field of accident.

6.1.2. For emergency responders:

Avoid contact with skin, eyes and clothing.

Wear appropriate personal protective equipment.

6.2. <u>Environmental precautions:</u>

Dispose of the spillage and the resulting waste according to the applicable environmental regulations. Do not allow the product and the resulting waste to enter sewers/soil/surface or ground water. Notify the respective authorities in accordance with local law in the case of environmental pollution immediately.

6.3. Methods and material for containment and cleaning up:

Collect the spilled product with absorbent (sawdust, diatomaceous earth, universal binder), then place into a suitable, closed, properly labelled chemical waste container for removal/disposal.

Dispose of the collected waste as described in Section 13.

6.4. Reference to other sections:

For further and detailed information see section 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1. <u>Precautions for safe handling:</u>

Observe conventional hygiene precautions.

Avoid contact with skin, eyes and clothing.

Do not eat, drink, or smoke when using this product.

Wash hands thoroughly after the use of this product.

Observe the pertinent regulations on industrial safety and basic hygiene rules.

Technical measures:

No special measures required.

Precautions against fire and explosion:

General measures of preventive fire protection.

7.2. <u>Conditions for safe storage, including any incompatibilities:</u>

Technical measures and storage condition:

Keep in the original, closed and appropriately labelled container.

Opened containers should be carefully closed and stored in a vertical position to avoid any leakage.

Keep away from food, drink and animal feed.

Incompatible materials: see section 10.5

Packaging material: no special prescriptions.

7.3. Specific end use(s):

No specific instructions available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. <u>Control parameters:</u>

Occupational exposure limit values (Commission Directive 2000/39/EC of 8 June 2000):

The components of the mixture are not regulated with exposure limit value.

DNEL values		Oral exposure		Dermal exposure		Inhalative exposure	
		Short term (acute)	Long term (chronic)	Short term (acute)	Long term (chronic)	Short term (acute)	Long term (chronic)
Consumer	Local	no data	no data	no data	no data	no data	no data
	Systemic	no data	no data	no data	no data	no data	no data
Worker	Local	no data	no data	no data	no data	no data	no data
	Systemic	no data	no data	no data	no data	no data	no data



PNEC values				
Compartment	Value	Note(s)		
Freshwater	no data	no note(s)		
Seawater	no data	no note(s)		
Freshwater sediment	no data	no note(s)		
Seawater sediment	no data	no note(s)		
Wastewater Treatment Plant (STP)	no data	no note(s)		
Intermittent release	no data	no note(s)		
Secondary poisoning	no data	no note(s)		
Soil	no data	no note(s)		

8.2. **Exposure controls:**

In case of a hazardous material with no controlled concentration limit it is the employer's duty to keep concentration levels down to a minimum achievable by existing scientific and technological means, where the hazardous substance poses no harm to workers.

Appropriate engineering controls: 8.2.1.

In pursuance of work is proper foresight needed to avoid spilling onto clothes and floors and to avoid contact with eyes and skin.

8.2.2. Individual protection measures, such as personal protective equipment:

Observe the general safety regulations when handling chemicals.

Contact with eyes, skin and clothing should be avoided.

Do not eat, drink, or smoke when using this product.

Wash hands and/or face before breaks and immediately after handling the product.

Observe the pertinent regulations on industrial safety and basic hygiene rules.

Eye/face protection: Use appropriate protective glasses (EN 166).

Skin protection:

Hand protection: Use appropriate protective gloves (EN 374).

The glove material should be impermeable and resistant to the product.

Due to missing tests no recommendation to the glove material can be given for the product.

Select glove material based on the penetration time, rates of diffusion and degradation.

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which may vary from manufacturer to manufacturer.

As the product is a mixture of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked before use.

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- Other: Use appropriate protective clothing.
- **Respiratory protection:** In case of normal condition of use and adequate ventilation, not required.
- Thermal hazards: none known.

Environmental exposure controls: 8.2.3.

No specific prescription.

The requirements detailed in section 8 assume skilled work under normal conditions and usage of the product for appropriate aims. If conditions differ from normal or work is carried out under extreme conditions, an expert's advice is necessary before deciding upon further protective measures.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties: 9.1.

	Parameter	Value / Test method / Remarks
1.	Appearance:	liquid – color according to product designation
2.	Odour:	no data*
3.	Odour threshold:	no data*
4.	pH:	no data*
5.	Melting point/freezing point:	no data*
6.	Initial boiling point and boiling range:	no data*
7.	Flash point:	no data*
8.	Evaporation rate:	no data*
9.	Flammability (solid, gas):	no data*
10.	Upper/lower flammability or explosive limits:	no data*

Date of revision: -



11.	Vapour pressure:	no data*
12.	Vapour density:	no data*
13.	Relative density:	no data*
14.	Solubility(ies):	no data*
15.	Partition coefficient: n-octanol/water:	no data*
16.	Auto-ignition temperature:	no data*
17.	Decomposition temperature:	no data*
18.	Viscosity:	no data*
19.	Explosive properties:	no data*
20.	Oxidizing properties:	no data*

9.2. Other information:

No data available.

*: The manufacturer did not carry out any tests on this parameter for the product or the results of the tests are not available at the time of publication of the data sheet.

SECTION 10: STABILITY AND REACTIVITY

10.1. **Reactivity:**

None known.

Chemical stability: 10.2.

Stable within normal temperature and under general work conditions.

Possibility of hazardous reactions: 10.3.

No hazardous reactions known.

Conditions to avoid: 10.4.

No conditions to avoid known.

Incompatible materials: 10.5.

No incompatible materials known.

10.6. **Hazardous decomposition products:**

No hazardous decomposition products known.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects: 11.1.

Acute toxicity: Based on available data, the classification criteria are not met.

Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/irritation: Causes serious eye irritation.

Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure: Based on available data, the classification criteria are not met.

STOT-repeated exposure: Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

Summaries of the information derived from the test conducted: 11.1.1.

No data available.

Relevant toxicological properties: 11.1.2.

No data available about the product.

Information about the components:

Acute toxicity:

2-(2H-benzotriazol-2-yl)-p-cresol (CAS number: 2440-22-4):

LD50 (rat): >2000 mg/kg

LD50 (rat, 8 d): >1000 mg/kg

LC50 (rat, 7d 4 h, 20 °C): >600 mg/m³

Ethyl phenyl(2,4,6-trimethylbenzoyl) phosphinate (CAS number: 84434-11-7):

LD50 (oral, rat): >2000 mg/kg

Skin sensitisation:

2-(2H-benzotriazol-2-yl)-p-cresol (CAS number: 2440-22-4):

Sensitizing: guinea pig (OECD 406/EEC B 6)

Ethyl phenyl(2,4,6-trimethylbenzoyl) phosphinate (CAS number: 84434-11-7):

Primary irritation:

Rabbit, skin: not irritating (Draize-test)

Rabbit, mucous membrane: not irritating (Draize-test)



Information on likely routes of exposure:

Ingestion, inhalation, skin contact, eye contact.

Symptoms related to the physical, chemical and toxicological characteristics: 11.1.4.

No data available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure: 11.1.5.

Causes skin irritation.

Causes serious eye irritation.

Contains isocyanates. May produce an allergic reaction.

11.1.6. Interactive effects:

No data available.

11.1.7. Absence of specific data:

No information.

11.1.8. Other information:

There are no toxicological tests available for this product. Classification is based on the properties of relevant components.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity:

The mixture is not classified as hazardous for the environment.

Information about the components:

Acute toxicity:

2-(2H-benzotriazol-2-yl)-p-cresol (CAS number: 2440-22-4):

LC50 (Brachydanio rerio, 96 h): >100 mg/l (OECD 203)

EC50 (Daphnia magna, 24 h, 20 °C): 1000 mg/l (OECD 202)

IC50 (sewage sludge, 3 h): 100 mg/l (OECD 209)

Ethyl phenyl(2,4,6-trimethylbenzoyl) phosphinate (CAS number: 84434-11-7):

EC50 (Daphnia magna, 48 h): 10 - 100 mg/l

EC20 (activated sludge, 180 min): >1000 mg/l (OECD 209)

12.2. Persistence and degradability:

Information about the components:

Degradability:

2-(2H-benzotriazol-2-yl)-p-cresol (CAS number: 2440-22-4):

Not readily biodegradable (OECD 301)

Ethyl phenyl(2,4,6-trimethylbenzoyl) phosphinate (CAS number: 84434-11-7):

Not readily biodegradable (OECD 301, activated sludge): <10 %/28 days

Bioaccumulation potential: 12.3.

No data available.

Mobility in soil: 12.4.

No data available.

Results of PBT and vPvB assessment: 12.5.

No data available.

12.6. Other adverse effects:

The product must not enter sewers, ground water, surface water or soil.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods: 13.1.

Disposal according to the local regulations.

Information regarding the disposal of the product:

Dispose of in accordance with applicable regulations.

No special recommendation from the manufacturer.

Do not dispose of together with household waste.

Do not empty into drains.

List of Waste Code:

No waste disposal key according to the List of Waste Code (LoW code) can be determined for this product, as only the purpose of application defined by the user enables an allocation. The LoW code number has to be determined after a discussion with a waste disposal specialist.

Information regarding the disposal of the packaging:

Dispose of in accordance with applicable regulations.

Physical/chemical properties that may affect waste treatment options shall be specified: 13.1.3.

None known.

Date of revision: -



13.1.4. Sewage disposal:

None known.

Special precautions for any recommended waste treatment: 13.1.5.

No data available.

SECTION 14: TRANSPORT INFORMATION

ADR/RID; ADN; IMDG; IATA:

Not dangerous good in sense of the transport regulations.

UN Number: 14.1.

No UN Number.

UN proper shipping name: 14.2.

No proper shipping name.

Transport hazard class(es): 14.3.

No transport hazard classes.

Packaging group: 14.4.

No packaging group.

Environmental hazards: 14.5.

No relevant information available.

Special precautions for user: 14.6.

No relevant information available.

Transport in bulk according to Annex II of MARPOL and the IBC Code: 14.7.

Not applicable

SECTION 15: REGULATORY INFORMATION

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

REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

Chemical safety assessment: no information. 15.2.

SECTION 16: OTHER INFORMATION

Information regarding the revision of the safety data sheet: no information.

Literature references / data sources:

Information provided by the manufacturer.

Methods used for the classification according to Regulation 1272/2008/EC:

Classification	Method
Skin corrosion/irritation, Hazard Category 2 — H315	Based on calculation method
Serious eye damage/eye irritation, Hazard Category 2 – H319	Based on calculation method

Relevant H-Phrases (number and full text) of Section 2 and 3:

H315 – Causes skin irritation.

H317 – May cause an allergic skin reaction.

H319 – Causes serious eye irritation.

H412 – Harmful to aquatic life with long lasting effects.

H413 – May cause long lasting harmful effects to aquatic life.

EUH 204 – Contains isocyanates. May produce an allergic reaction.



Training advice: no data available.

Full text of the abbreviations in the safety data sheet:

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.

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

ATE: Acute Toxicity Estimate.

AOX: Adsorbable organic halides.

BCF: Bioconcentration factor.

BOD: Biological Oxygen Demand.

CAS number: Chemical Abstract Service number.

CLP: Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.

CMR effects: Carcinogenic, mutagenic, reprotoxic effects.

COD: Chemical Oxygen Demand.

CSA: Chemical Safety Assessment.

CSR: Chemical Safety Report.

DNEL: Derived-No-Effect-Level.

ECHA: European Chemical Agency.

EC: European Community.

EC number: EINECS and ELINCS numbers (see also EINECS and ELINCS).

EEC: European Economic Community.

EEA: European Economic Area (EU + Iceland, Liechtenstein and Norway).

EINECS: European Inventory of Existing Commercial Chemical Substances.

ELINCS: European List of Notified Chemical Substances.

EN: European Norm.

EU: European Union.

EWC: European Waste Catalogue (replaced by LoW – see below).

GHS: Globally Harmonized System of Classification and Labelling of Chemicals.

IATA: International Air Transport Association.

ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air.

IMDG: International Maritime Dangerous Goods.

IMSBC: International Maritime Solid Bulk Cargoes.

IUCLID: International Uniform Chemical Information Database.

IUPAC: International Union of Pure and Applied Chemistry.

Kow: n-Octanol - Water Partition Coefficient.

LC50: Lethal concentration resulting in 50 % mortality.

LD50: Lethal dose resulting in 50 % mortality (median lethal dose).

LoW: List of Waste.

LOEC: Lowest Observed Effect Concentration.

LOEL: Lowest Observed Effect Level.

NOEC: No Observed Effect Concentration.

NOEL: No Observed Effect Level.

NOAEC: No Observed Adverse Effect Concentration.

NOAEL: No Observed Adverse Effect Level.

OECD: Organization for Economic Cooperation and Development.

OSHA: Occupational Safety and Health Administration.

PBT: Persistent, Bioaccumulative and Toxic.

PNEC: Predicted No Effect Concentration.

QSAR: Quantitative Structure Activity Relationship.

REACH: Regulation 1907/2006/EC concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals.

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

SCBA: Self Contained Breathing Apparatus.

SDS: Safety Data Sheet.

STOT: Specific Target Organ Toxicity.

SVHC: Substances of Very High Concern.

UN: United Nations.

UVCB: Chemical Substances of Unknown or Variable Composition, Complex Reaction Products and Biological Materials.

VOC: Volatile Organic Compound.

vPvB: very Persistent and very Bioaccumulative.

This safety data sheet had been prepared on the basis of information provided by the manufacturer/supplier and conform to the relevant regulations.

Date of issue: 13. 02. 2019

Date of revision: -Version: 1



The information, data and recommendations contained herein are provided in good faith, obtained from reliable sources and believed to be true and accurate as of the date issued; however, no representation is made as to the comprehensiveness of the information.

The SDS shall be used only as a guide for handling the product; in the course of handling and using the product other considerations may arise or be required.

Users are cautioned to determine the appropriateness and applicability of the above information to their particular circumstances and purposes and assume all risk associated with the use of this product.

It is the responsibility of the user to fully comply with local, national and international regulations concerning the use of this product.

> Safety data sheet was prepared by: MSDS-Europe International branch of ToxInfo Kft.

Professional help regarding the explanation of the safety data sheet:

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