LUXAL DESOL

Revision No.:4/ 1
First Revision Date: 07-11-17
Revision Date:07-11-17
Print Date:07-11-17

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product	**LUXAL DESOL**
Item code(s):	430445

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

Use, scope:	Paint remover based on organic solvents. The product is used in consumer and professional use.
Use:	
Restrictions on use	No restrictions known.

1.3. Details of the supplier of the safety data sheet

Producer	CHROMOS - Boje i lakovi d.d. Radnička cesta 173D 10000 Zagreb - Hrvatska Tel.: + 385 1 241 0666, Fax.: + 385 1 240 5535
Responsible person	Ljiljana Zgrebec e-mail: ljiljana.zgrebec@chromos-bil.hr

1.4. Emergency telephone number

Phone	In case of a health hazard call a personal doctor or doctor on duty. Additional information are available on the phone No.++385/(0)1/2410666.

2. Hazards identification

2.1. Classification of the substance or mixture
Classification (EU 1272/2008)

Categories of danger	Flammable Liquid 2 Serious Eye Damage/Eye Irritation 2

2.2. Label elements
EU 1272/2008:

Signal Word	**Danger**

Contains:	1,3-dioxolane
Hazard phrases (H-phrases):	H225 - Highly flammable liquid and vapour. H319 - Causes serious eye irritation.
Precautionary statements:	P101 - If medical advice is needed, have product container or label at hand. Keep out of reach of children. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P361 - Remove/take off immediately all contaminated clothing. P501 - Dispose of contents/container to authorized disposal organisation.

2.3. Other hazards

	Product contains organic solvents.

3. Composition/information on ingredients

3.2. Mixtures

Chemical composition:	Paint remover based on organic solvents.

Chemical Name	**Concentration [weight %]**	**CAS EINECS EU INDEX REACH reg.no.**	**Classification (REGULATION (EC) No. 1272/2008) Notes**
1,3-dioxolane	50-100	646-06-0 211-463-5 605-017-00-2 01-2119490744-29	Eye Irrit.2; H319 Flam. Liq. 2; H225
dimethoxymethane	10-19,99	109-87-5 203-714-2 - 01-2119664781-31	Flam. Liq. 1; H224
hydrocarbons, C10-C13 n-alkanes, isoalkanes, cyclic, <2% aromatics	5,0-9,99	- 918-481-9 - 01-2119457273-39	Asp.Tox.1; H304
ethanol	3,0-4,99	64-17-5 200-578-6 603-002-00-5 01-2119457610-43	Flam. Liq. 2; H225
White mineral oil (petroleum)	1,0-2,99	8042-47-5 232-455-8 - 01-2119487078-27	Asp.Tox.1; H304
methanol	1,0-2,99	67-56-1 200-659-6 603-001-00-X 01-2119433307-44-xxxx	STOT SE 1; H370 (nervous system, Optic nerve) Acute Tox. 3; H331 Acute Tox. 3; H311 Acute Tox. 3; H301 Flam. Liq. 2; H225

Notes:	The classification for the product was made on basis of actual content of components.The cointained substances are shown in intervals.In case of inspection check (control of classification) we are ready to send to inspection bodies on their request the actual content of individual components.

4. First aid measures

4.1. Description of first aid measures

In case of excessive inhalation:	If there are any symptoms transfer the victim to clean air.
In case of contact with skin:	Remove contaminated clothing. Wash skin with soap and water.
In case of contact with eyes:	Flush eyes with water to remove product residue.
In case of ingestion:	Do not eat. Rinse mouth with water. Do not induce vomiting.

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

In case of excessive inhalation:	No data.
In case of contact with skin:	None data known.
In case of contact with eyes:	None data known.
In case of ingestion:	None data known.

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

	No data available

5. Firefighting measures

5.1. Extinguishing media

Fire Extinguishing Media:	SUITABLE: Foam, powder, carbon dioxide, inert gas or INERGEN FM 200 (started phase fire fighting), water fog. UNSUITABLE: Water jet, unless USED ONLY for water mist to cool containers with flammable products. Remove all possible sources of ignition: open flame, lit cigarette, sparkling of tools and equipment. Close packagings with product.
Unsuitable extinguishing media:	Open water jet

5.2. Special hazards arising from the substance or mixture

Specific methods of extinguishing fire:	Extinguish fire in wind direction. Cool down vessels with product, which do not burn with dispersed water, prevent leakage of the product and place them in a safety place. The possibility of formation man harmful gases and thick smoke during the fire. The use of protective mask with filter A is mandatory.

5.3. Advice for firefighters

Special equipment to protect firefighters:	Independent fire extinguisher on compressed air, a full fire-fighting equipment to protect the body.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions:	Remove possible sources of ignition (flame, lit cigarette, sparkling etc.).

	Protect respiratory system against inhalation of vapours. Provide good ventilation.

6.2. Environmental precautions

Environmental precautions:	Prevent leakage into water, water dams, cellars, caves or sewage system.

6.3. Methods and material for containment and cleaning up

Methods of cleaning up:	Absorb the outflown product and mix it with soil, sand or other absorptive materials for liquids. Leave waste to the authorized waste collectors.

6.4. Reference to other sections	Disposal of waste - Chapter 13, personal protective equipment - Chapter 8.

7. Handling and storage

7.1. Precautions for safe handling

Personal precautions:	At the use product vapours may produce flammable/explosive mixtures of vapours and air. During the pumping static electrification may occur. Emptying of static electrification, which could cause fire. At the decanting of larger quantities assure conductivity with binding and earthing of complete equipment. Prevent contact with hot objects, sparkles, flame and sources of ignition.
Advice on safe handling:	Do not smoke, drink or eat while handling the product. Do not breathe vapors, avoid contact with skin and eyes. At work wear cotton overalls or coveralls, nitrile rubber gloves and safety glasses with side shields.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and conditions:	SUITABLE: Store in tightly closed vessels in a cool and ventilated room. Prevent the formation of static electrification. UNSUITABLE: Storage in the room together with chemicals (oxidants, acids) may cause fire. In the warehouse there should be no tools or machines, which are the source of sparkling. Store in an upright position.
Storage Class:	3A (German VCI Guideline)

7.3. Specific end use(s)	No further relevant information available.

8. Exposure controls/personal protection

8.1. Control parameters

The prescribed of threshold limit value (TLV) for occupational exposure to hazardous substances in the atmosphere post the Regulation on the safety of employees from risks against chemical substance exposure at work:

Data on components:

Chemical Name	TLV (mg/m3)	TLV (ml/m3, PPM)	STL	Note
dimethoxymethane	3200	1000		
hydrocarbons, C10-C13 n-alkanes, isoalkanes, cyclic, <2% aromatics	1000	200	4	

ethanol	1900	1000	4	Y
methanol	260	200	4	K BAT EU Y

Biological limit values for components:

Chemical Name	Characteristic indication | Biological sample | Sampling time | Biological limit values
methanol	methanol | urine | after working shift 24.7 mmol/mol creathinine*

DNEL = Derived No Effect Level

Component Data:

Chemical Name	Population | Exposure | Effects | Values (units)
1,3-dioxolane	Workers Longterm inhalational Systemic effects 18.09 mg/m3 Consumers Longterm dermal Systemic effects 4.36 mg/m3
dimethoxymethane	Workers Longterm inhalational Systemic effects 126.6 mg/m3 Workers Longterm dermal Systemic effects 17.9 mg/kg/bw/day Consumers Longterm inhalational Systemic effects 31.5 mg/m3 Consumers Longterm dermal Systemic effects 18.1 mg/kg/bw/day Consumers Longterm oral Systemic effects 18.1 mg/kg/bw/day
ethanol	Workers Longterm inhalational Systemic effects 950 mg/m3 Workers Shortterm inhalational Local effects 1900 mg/m3 Workers Longterm dermal Systemic effects 343 mg/kg/bw/day Consumers Longterm inhalational Systemic effects 114 mg/m3 Consumers Shortterm inhalational Local effects 950 mg/m3 Consumers Longterm dermal Systemic effects 206 mg/kg/bw/day Consumers Longterm oral Systemic effects 87 mg/kg/bw/day
methanol	Workers Shortterm dermal Systemic effects 40 mg/kg/bw/day Workers Shortterm inhalational Systemic effects 260 mg/m3 Workers Shortterm inhalational Local effects 260 mg/m3 Workers Longterm dermal Systemic effects 40 mg/kg/bw/day Workers Longterm inhalational Systemic effects 260 mg/m3 Workers Longterm inhalational Local effects 260 mg/m3 Consumers Shortterm dermal Systemic effects 8 mg/kg/bw/day Consumers Shortterm inhalational Systemic effects 50 mg/m3 Consumers Shortterm oral Systemic effects 8 mg/kg/bw/day Consumers Longterm inhalational Local effects 50 mg/m3 Consumers Longterm oral Systemic effects 8 mg/kg/bw/day Consumers Longterm inhalational Systemic effects 50 mg/m3 Consumers Longterm dermal Systemic effects 8 mg/kg/bw/day Consumers Shortterm inhalational Local effects 50 mg/m3

PNEC = Predicted No Effect Concentration

Component Data:

Chemical Name	Media detail | Values
1,3-dioxolane	Fresh water = 19.7 mg/l intermittent releases = 0.95 mg/l Sea water = 1.97 mg/l Cleaning device = 1 mg/l Sediment in fresh water = 77.7 mg/kg dry weight Sediment in sea water = 7.77 mg/kg dry weight Earth = 2.62 mg/kg dry weight
dimethoxymethane	Fresh water = 14.577 mg/l Sea water = 1.477 mg/l Cleaning device = 10000 mg/l Sediment in fresh water = 13.135 mg/kg dry weight Earth = 4.654 mg/kg dry weight
ethanol	Fresh water = 0.96 mg/l Sea water = 0.79 mg/l Cleaning device = 580 mg/l

	Sediment in fresh water = 3.6 mg/kg dry weight Sediment in sea water = 2.9 mg/kg dry weight Earth = 0.63 mg/kg dry weight
methanol	Fresh water 154 mg/l Sea water 15.4 mg/l Sediment in sea water 570.4 mg/kg dry weight Earth 23.5 mg/kg Cleaning device 100 mg/l intermittent releases 1540 mg/l

8.2. Exposure controls

Respiratory protection:	When used in confined spaces, prolonged work, wear protective mask for the whole face with filter "A". In case that the oxygen concentration in the air of work room falls under 17 %, use independent respirator with an open circle on the compressed air.
Hand protection:	Special protection is not necessary, use protective gloves only at direct contact with the product
Eye protection:	Not needed.
Skin protection:	Wear protective overalls made of cotton.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

(a) Appearance:	Viscous liquid.
(b) Odour:	Specific for organic solvents
(c) Odour threshold:	Product components have a high limit of odor detection.
(d) pH:	No data available
e) Melting point/freezing point:	< 0 °C [ASTM D97/87] ; computational method, based on component data ; hydrocarbons, C10-C13 n-alkanes, isoalkanes, cyclic, <2% aromatics
(f) Initial boiling point and boiling range:	42 °C at 760 mmHg ; computational method, based on component data ; dimethoxymethane
(g) Flash point:	2 (°C); ISO 3679:2015, closed cup ;
(h) Evaporation rate:	23.1 butil acetat = 1 ; computational method, based on component data ; dimethoxymethane
(i) Flammability (solid, gas):	Highly flammable liquid and vapour.
(j) Upper/lower flammability or explosive limits:	0.6 6.1 ; computational method, based on component data
(k) Vapour pressure:	70 mmHg at 20 °C 1,3-dioxolane
(l) Vapour density:	2.6 (zrak= 1) 2.55 (zrak= 1) dimethoxymethane 1,3-dioxolane
(m) Relative density:	0,92-1,02 ISO 2811
(n) Solubility(ies):	Insoluble
(o) Partition coefficient: n-octanol/water:	; computational method, based on component data
(p) Auto-ignition temperature:	237 °C ; computational method, based on component data ; dimethoxymethane

(q) Decomposition temperature:	No data
(r) Viscosity:	DIN 53019 23°C 6000 - 8000 mPas
Kinematic viscosity:	> 21 mm²/s, 40 °C
(s) Explosive properties:	Product is not explosive. However, formation of explosive steam/air mixtures is possible.
(t) Oxidising properties:	No data
9.2. Other information	
Solids content: (calculated, %)	4,2 - 5,2
Organic solvents (wght. %)	95-96
Water content: (calculated, %)	0.20

10. Stability and reactivity

10.1. Reactivity

Reactivity:	Stable - when used in accordance with the instructions.

10.2. Chemical stability

Stability:	The product is stable under conditions in accordance with the instructions and proper storage.

10.3. Possibility of hazardous reactions

Hazardous conditions:	The presence of open flame or hazardous materials. Avoid contact of product with heat, sparks, flames and other ignition sources.

10.4. Conditions to avoid

Unwanted conditions:	No data available

10.5. Incompatible materials

Incompatibility:	The product is non-reactive and compatible with majority of substances, except with extreme oxidants. Keep the product in the original packaging. Do not mix with other products.

10.6. Hazardous decomposition products

	No data available

11. Toxicological information

11.1. Information on toxicological effects
(a) acute toxicity:

ORAL	Product contains components which may have harmful effects after ingestion and may cause troubles to more sensitive individuals. Such components are: ; computational method, based on component data methanol
DERMAL	Product contains components which may cause effects in case of contact with skin and may cause problems to some individuals. Such components are: ; computational method, based on component data methanol
INHALATIONAL	Product contains components which may have harmful effects at contact after inhalation of vapour, mists or gas and may cause troubles to more

	sensitive individuals. Such components are: ; computational method, based on component data methanol
Special precautionary measures:	Wash hands thoroughly after handling. Do no eat, drink or smoke when using this product.

Data on components:

Chemical Name	LC50 inhalation	Oral LD50	Dermal LD50
1,3-dioxolane	LC50-4 hours Rat 20650 mg/m3		
ethanol	LC50-4 hours Rat 125 mg/l		
White mineral oil (petroleum)		OLD50 Rat > 5000 mg/kg	
methanol	LC50-4 hours Rat 83 mg/l	OLD50 Rat 5628 mg/kg	

(b) skin corrosion/irritation:

Skin:	None data known.
Special precautionary measures:	Product does not contain components classified as corrosive/irritant to skin.

(c) serious eye damage/irritation:

Eyes:	Causes serious eye irritation.
Special precautionary measures:	If eye irritation persists: Get medical advice/attention.

(d) respiratory or skin sensitisation:

Skin:	None data known.
Special precautionary measures:	Product does not contain components classified as causing skin sensitivity.

(e) germ cell mutagenicity:

Exposure to product:	None data known.
Special precautionary measures:	Product does not contain components classified as mutagenic.

(f) carcinogenicity:

Exposure to product:	None data known.
Special precautionary measures:	Product does not contain components classified as cancerogenic.

(g) reproductive toxicity:

Exposure to product:	None data known.
Special precautionary measures:	Product does not contain components classified as being reprotoxic.

(h) STOT-single exposure:

Special precautionary measures:	Product does not contain components classified as causing harmful effect to organs on single exposure.

(i) STOT-repeated exposure:

Special precautionary measures:	Product does not contain components classified as causing harmful effect to organs on repeated or prolonged exposure.

(j) aspiration hazard:

INHALATIONAL	Product contains components which may cause aspiration hazard, but

	kinematic viskosity is high enough that product is not classified with aspiration hazard.
Special precautionary measures:	Do NOT induce vomiting.

12. Ecological information

12.1. Toxicity

Ecotoxicity - Data on components:	Product (based on the data component) is not classified as dangerous for the environment.

Chemical Name	Ecotoxicity conc.
ethanol	Aquatic LC50 fish = 13500 mg/l Aquatic LC50 Daphnia = 5000 mg/l

12.2. Persistence and degradability

Biodegradation	No data available

12.3. Bioaccumulative potential

Bioconcentration:	No data available

12.4. Mobility in soil

Mobility	No data

12.5. Results of PBT and vPvB assessment

PBT and vPvB:	No data available

12.6. Other adverse effects

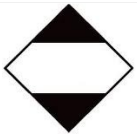
Ecotoxicity - Data on components:	Based on the classification of components, product is not recognised to have adverse effects on the environment.

13. Disposal considerations

13.1. Waste treatment methods

Product:	The product leftovers , waste and useless packaging should be handled in accordance with the Regulations on processing of special and dangerous waste (dir. 91/689/EEC, dir. 2000/532/EC). Waste classification number: 08 01 11 Waste hazardeous characteristic: H5 The recommended degradation method is the use of the controlled high temperature incineration or disposal to the deposits for dangerous substances.
Packaging:	In case the metal packaging can not be reused, it will be recycled in the ironworks or disposed at special deposits (dir. 94/62/EC, dir. 1999/177/EC).

14. Transport information

	Transport by road/by railway - ADR/RID:	Transport by sea – IMDG:	Air transport (IATA):
14.1. UN number	1263	1263	1263
14.2. UN proper shipping name	PAINT	PAINT	PAINT
14.3. Transport hazard class(es)	3	3	3
14.4. Packing group	II	II	II
Label:			
Hazard number:	33	33	33
Tunnel restriction code:	(D/E)		
Limited quantities:	 packages: inner: =< 5 units; outer: =< 30 units		
Instructions for emergency EmS:		F-E, S-E	
14.5. Environmental hazards	No	No	No
14.6. Special precautions for user	Transport with respecting transport labels and the requests of transportation legislation.		
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable		

15. Regulatory information

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

This Safety Data Sheet has been prepared in accordance with a comprehensive chemicals legislation - REACH Regulation on chemicals and the Regulation for classification, labeling and packaging (CLP/GHS).

The product due to its (hazardous properties falls under the law of Major Accident Hazard (EU 96/82 - Seveso), is classified in category of this Regulation.
Hazard categories (EC) No 1272/2008: P5c FLAMMABLE LIQUIDS

15.2. Chemical safety assessment

Has not been conducted.

16. Other information

The importance of H phrases from Chapter 3:
H370 - Causes damage to organs (nervous system, Optic nerve) .
H301+H311+H331 - Toxic if swallowed, in contact with skin or inhaled.
H225 - Highly flammable liquid and vapour.
H304 - May be fatal if swallowed and enters airways.
H224 - Extremely flammable liquid and vapour.
H319 - Causes serious eye irritation.

Changes from previous revisions:	Changes to the sheet were made in section: 2., 3., 8., 9., 11., 12., 14., 15., 16.
Literature / Data Sources:	Supplier's / manufacturer's safety data, references to toxicological databases.

The information in this Safety Data Sheet refer only to the mentioned product in the form as delivered and it is not necessary valid when this material is used in the combination with other materials or in the processes, which are not foreseen in the instructions for use. This information is correct to the supplier's best of knowledge and reliable at the time of the publication of this Safety data sheet. It is the user's responsibility to ascertain the suitability of the product for a specific use.

The data in this Safety data sheet do not prove the quality of the product, they are only the instructions for the safe use of the product with the user.
In case of non-compliance with the measures or incorrect use of the product , stated in the Safety data sheet we do not accept any responsibility for the consequences.