



Safety Data Sheet

according to Regulation (EC) No 1907/2006

die:master spacer varnish 1956 0200 red and 1956 0300 blue

Revision date: 16.05.2023

Product code: 19560xx0

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

1.1. Product identifier

die:master spacer varnish 1956 0200 red and 1956 0300 blue

Further trade names

contained in:

1956 0800 die:master Set red

1956 0900 die:master Set blue

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

Uses advised against

No information available.

1.3. Details of the supplier of the safety data sheet

Company name: Renfert GmbH
Street: Untere Giesswiesen 2
Place: D-78247 Hilzingen
Telephone: +49 7731 8208-0
e-mail: info@renfert.com
Contact person: Frau Andris
e-mail: silke.andris@renfert.com
Internet: www.renfert.com

1.4. Emergency telephone number:

 IRL: 01 809 2566 (Healthcare Professionals) | GB: 0044 151 951 3317 (Health and Safety Executive (HSE) Chemicals)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Flam. Liq. 2; H225

Eye Irrit. 2; H319

STOT SE 3; H335

STOT SE 3; H336

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

butanone

pentan-3-one

n-butyl acetate

Signal word:

Danger

Pictograms:



Hazard statements

H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 Avoid breathing vapours.
P280 Wear protective gloves and eye/face protection.
P337+P313 If eye irritation persists: Get medical advice/attention.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Special labelling of certain mixtures

EUH066 Repeated exposure may cause skin dryness or cracking.
EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

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Pictograms:



2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.
This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
78-93-3	butanone			20 - 35%
	201-159-0	606-002-00-3	01-2119457290-43	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066			
96-22-0	pentan-3-one			20 - 35%
	202-490-3	606-006-00-5	01-2119531111-60	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3, STOT SE 3; H225 H319 H335 H336 EUH066			
123-86-4	n-butyl acetate			5 - 20%
	204-658-1	607-025-00-1	01-2119485493-29	
	Flam. Liq. 3, STOT SE 3; H226 H336 EUH066			
13463-67-7	Titanium dioxide			3 - 10%
	236-675-5		01-2119489379-17	

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated, saturated clothing immediately.
Get medical advice/attention if you feel unwell.

After inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

After contact with skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

After contact with eyes

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

After ingestion

Rinse mouth immediately and drink 1 glass of water. When in doubt or if symptoms are observed, get medical advice.

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

The following symptoms may occur: Vapours may cause drowsiness and dizziness. Processing vapours can irritate the respiratory tracts, skin and eyes. Repeated exposure may cause skin dryness or cracking.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Extinguishing powder, Carbon dioxide (CO₂), alcohol resistant foam, Water spray jet

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Vapours can form explosive mixtures with air.



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Thermal decomposition can lead to the escape of irritating gases and vapours.

5.3. Advice for firefighters

Do not inhale explosion and combustion gases.

In case of fire: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****General advice**

Provide adequate ventilation.

Use personal protection equipment.

Remove all sources of ignition.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up**Other information**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

Collect in closed and suitable containers for disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Use only in well-ventilated areas.

Avoid contact with skin, eyes and clothes.

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

Advice on protection against fire and explosion

Vapours can form explosive mixtures with air.

Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharges.

Advice on general occupational hygiene

Avoid breathing vapours.

Avoid contact with skin, eyes and clothes.

Wash hands before breaks and after work.

Keep away from food, drink and animal feedingstuffs.

Further information on handling

If handled uncovered, arrangements with local exhaust ventilation should be used if possible.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed in a cool, well-ventilated place.

7.3. Specific end use(s)

Please refer to our internet website for more information. www.renfert.com

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Occupational exposure limits**

CAS No	Substance	ppm	mg/m ³	fib/cm ³	Category	Origin
96-22-0	Diethylketon	200	700		TWA (8 h)	
		250	875		STEL (15 min)	
78-93-3	Methyl ethyl ketone (MEK) (Butan-2-one)	200	600		TWA (8 h)	
		300	900		STEL (15 min)	
123-86-4	n-Butyl acetate	50	241		TWA (8 h)	
		150	723		STEL (15 min)	
13463-67-7	Titanium dioxide, total inhalable dust	-	10		TWA (8 h)	

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Biological limit values

CAS No	Substance	Parameter	Value	Test material	Sampling time
78-93-3	Butan-2-one	Butan-2-one	70 µmol/L	Urine	Post shift

8.2. Exposure controls



Appropriate engineering controls

Safe handling: see section 7

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.

Suitable material: NBR (Nitrile rubber), Butyl caoutchouc (butyl rubber)

Thickness of the glove material: 0,5 mm

Breakthrough time: >= 60 min

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Respiratory protection

Use only in well-ventilated areas.

Usually no personal respirative protection necessary.

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	various, depending on coloration
Odour:	characteristic

	Test method
Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	79 °C
Flammability:	not applicable
Lower explosion limits:	1,2 vol. %
Upper explosion limits:	11,5 vol. %
Flash point:	< 0 °C DIN 51755 (cc)
Auto-ignition temperature:	370 °C
Decomposition temperature:	not determined
pH-Value:	not applicable
Viscosity / kinematic:	not determined
Water solubility:	Immiscible
Partition coefficient n-octanol/water:	not determined
Vapour pressure:	105 hPa
(at 20 °C)	
Density (at 20 °C):	0,80 - 1,10 g/cm ³

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

not explosive.

Vapours can form explosive mixtures with air.

Further Information

No further relevant information available.



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SECTION 10: Stability and reactivity

10.1. Reactivity

Vapours can form explosive mixtures with air.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

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

Acute toxicity

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

Irritation and corrosivity

Causes serious eye irritation.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

STOT-single exposure

May cause respiratory irritation. (pentan-3-one)

May cause drowsiness or dizziness. (butanone; pentan-3-one)

STOT-repeated exposure

Repeated exposure may cause skin dryness or cracking.

Aspiration hazard

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

11.2. Information on other hazards

Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

Further information

The product has not been tested. The statement is derived from the properties of the single components.

SECTION 12: Ecological information

12.1. Toxicity

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

12.2. Persistence and degradability

There are no data available on the mixture itself.

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
96-22-0	pentan-3-one	0,82

12.4. Mobility in soil

There are no data available on the mixture itself.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.



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Further information

The product has not been tested. The statement is derived from the properties of the single components. Do not allow uncontrolled discharge of product into the environment.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations**

Send to a hazardous waste incinerator facility under observation of official regulations.

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

List of Wastes Code - residues/unused products

080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish containing organic solvents or other hazardous substances; hazardous waste

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information**Land transport (ADR/RID)**

14.1. UN number or ID number: UN 1263
14.2. UN proper shipping name: FARBE
14.3. Transport hazard class(es): 3
14.4. Packing group: II
Hazard label: 3

**Marine transport (IMDG)**

14.1. UN number or ID number: UN 1263
14.2. UN proper shipping name: PAINT
14.3. Transport hazard class(es): 3
14.4. Packing group: II
Hazard label: 3



Marine pollutant: no

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 1263
14.2. UN proper shipping name: PAINT
14.3. Transport hazard class(es): 3
14.4. Packing group: II
Hazard label: 3

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Further information: see section 6, 7, 8

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

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EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40, Entry 75

2010/75/EU (VOC): 67 %

National regulatory information

Employment restrictions:

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water hazard class (D):

1 - slightly hazardous to water

Additional information

Regulation (EC) No. 1005/2009 on substances that lead to the depletion of the ozone layer: not applicable

REGULATION (EU) 2019/1021 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on persistent organic pollutants: not applicable

Regulation (EU) No. 649/2012 of the European parliament and of the council concerning the export and import of dangerous chemicals: not applicable

SECTION 16: Other information**Changes**

Abs. 2, 9, 12, 16 * Data changed compared with the previous version.

Abbreviations and acronyms

PBT: persistent and bioaccumulative and toxic

vPvB: very persistent, very bioaccumulative

CAS: Chemical Abstracts Service (division of the American Chemical Society)

ATE: Acute Toxicity Estimate

LD50: lethal dose, 50%

LC50: lethal concentration, 50%

ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement concernant le transport international ferroviaire de marchandises Dangereuses (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

ICAO: International Civil Aviation Organization

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

VOC: volatile organic compound(s)

Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Eye Irrit. 2; H319	Calculation method
STOT SE 3; H335	Calculation method
STOT SE 3; H336	Calculation method

Relevant H and EUH statements (number and full text)

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

EUH066 Repeated exposure may cause skin dryness or cracking.

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. Restricted to professional users.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)