

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Durolan Die spacer

Print date: 11.02.2015

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

1.1. Product identifier

Durolan die spacer

Product code:25001
25002
25003
25004
25005**Further trade names**

-blue, -red, -silver, -clear, -gold

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

Use of the substance/mixture

Die spacer

1.3. Details of the supplier of the safety data sheet

Company name:	DFS-DIAMON GmbH
Street:	Ländenstrasse 1
Place:	D-93339 Riedenburg
Telephone:	+49 (0) 9442 9189 0
Contact person:	Bernd Hildebrandt
e-mail:	bernd.hildebrandt@dfs-diamon.de
Internet:	http://www.dfs-diamon.de

1.4. Emergency telephone number:

+49 (0) 9442 9189 0 Mo-Fr 9 a.m. – 3 p.m. UTC+1

SECTION 2: Identification of hazards

2.1. Classification of the substance or mixture

Indications of danger: F - Highly flammable, Xn - Harmful, Xi - Irritant

R phrases:

Highly flammable.

Irritating to eyes.

Harmful: may cause lung damage if swallowed.

Repeated exposure may cause skin dryness or cracking.

Vapours may cause drowsiness and dizziness.

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

Hazard categories:

Flammable liquid: Flam. Liq. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Specific target organ toxicity - single exposure: STOT SE 3

Hazard Statements:

Highly flammable liquid and vapor.

Causes serious eye irritation.

May cause drowsiness or dizziness.

2.2. Label elements

Hazardous components which must be listed on the label

propan-2-ol; isopropyl alcohol; isopropanol

acetone; propan-2-one; propanone

1-methoxy-2-propanol; monopropylene glycol methyl ether

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Signal word:

Danger

Pictograms:

GHS02-GHS07



Hazard statements

Highly flammable liquid and vapor.

Causes serious eye irritation.

May cause drowsiness or dizziness.

Safety recommendations

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

Avoid breathing dust/fume/gas/mist/vapors/spray.

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

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

IF INHALED: Expose person to fresh air and ensure comfortable breathing.

Call a POISON CENTER/doctor if you feel unwell.

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

Store in a well-ventilated place. Keep container tightly closed.

Special labelling of certain mixtures

Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
REACH No		
200-661-7	propan-2-ol; isopropyl alcohol; isopropanol	
67-63-0	F - Highly flammable, Xi - Irritant R11-36-67	40 - 50 %
603-117-00-0	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336	
200-662-2	acetone; propan-2-one; propanone	
67-64-1	F - Highly flammable, Xi - Irritant R11-36-66-67	35 - 40 %
606-001-00-8	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066	
01-2119471330-49		
203-539-1	1-methoxy-2-propanol; monopropylene glycol methyl ether	4 - 10 %
107-98-2	R10-67	
603-064-00-3	Flam. Liq. 3, STOT SE 3; H226 H336	
01-2119457435-35		

Full text of R-, H- and EUH-phrases: see section 16.

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SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for sufficient time, then consult an ophthalmologist immediately.

After ingestion

Mind the risk of aspiration if vomiting occurs. Rinse mouth immediately and drink plenty of water.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing devices

Suitable extinguishing

Water spray jet, carbon dioxide (CO₂), foam, extinguishing powder.

5.2. Special hazards arising from the substance or mixture

Highly flammable, vapors can form explosive mixtures with air.

5.3. Advice for firefighters

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

Use water spray jet to protect persons and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow water to enter drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Do not breathe gas/fumes/vapor/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Danger of explosion

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste 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

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Advice on safe handling

If handled uncovered, equipment with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapor/spray.

Advice on protection against fire and explosion

Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharge. Vapors can form explosive mixtures with air.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Advice on storage compatibility

Do not store together with: oxidizing agent, pyrophoric or self-heating substances.

7.3. Specific end use(s)

Die spacer

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
107-98-2	1-Methoxypropan-2-ol	100	375		TWA (8 h)	WEL
		150	560		STEL (15 min)	WEL
67-64-1	Acetone	500	1210		TWA (8 h)	WEL
		1500	3620		STEL (15 min)	WEL
67-63-0	Propan-2-ol	400	999		TWA (8 h)	WEL
		500	1250		STEL (15 min)	WEL

8.2. Exposure controls



Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapor/spray.

Remove contaminated, soaked clothing immediately. Draw up and observe skin protection program. Wash hands and face before breaks and after work and take a shower if necessary. Do not consume food or drinks while using the product.

Eye/face protection

Suitable eye protection: goggles.

Hand protection

When handling chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals should be chosen depending on the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above with the supplier of these gloves.

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Skin protection

Flame-retardant protective clothing. Wear anti-static footwear and clothing

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid	
Color:	according to product specification	
Odor:	fruity	
		Test method
pH-Value:	not determined	
Changes in the physical state		
Melting point:	not determined	
Initial boiling point and boiling range:	56 °C	
Flash point:	< 21 °C	
Flammability		
Solid:	not applicable	
Gas:	not applicable	
Lower explosion limits:	2 vol. %	
Upper explosion limits:	14,3 vol. %	
Ignition temperature:	460 °C	
Auto-ignition temperature		
Solid:	not applicable	
Gas:	not applicable	
Decomposition temperature:	not determined	
Oxidizing properties		
Not oxidizing.		
Vapor pressure:	246 hPa	
(at 20 °C)		
Vapor pressure:	814 hPa	
(at 50 °C)		
Density:	0,9 g/cm ³	
Water solubility:	easily soluble	
Solubility in other solvents		
not determined		
Partition coefficient:	not determined	
Viscosity / dynamic:	0,44 mPa·s	
(at 20 °C)		
Vapour density:	not determined	
Evaporation rate:	not determined	
Solvent content:	> 78,5 %	
9.2. Other information		
Solid content:	not determined	

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SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable, ignition hazard.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapors can form explosive mixtures with air.

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 toxicological effects

Acute toxicity

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

Acute toxicity

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol				
	oral	LD50	5840 mg/kg	Rat	OECD 401
	dermal	LD50	12800 mg/kg	Rabbit	GESTIS
67-64-1	acetone; propan-2-one; propanone				
	oral	LD50	5800 mg/kg	Rat	ECHA
	dermal	LD50	> 7426 mg/kg	Rabbit	ECHA
	inhalative (4 h) vapour	LC50	76 mg/l	Rat	ECHA
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether				
	oral	LD50	4016 mg/kg	Rat	Regulation (EC) No. 440/2008, Annex, B.1 bis
	dermal	LD50	> 2000 mg/kg	Rabbit	Regulation (EC) No. 440/2008, Annex, B.3

Irritation and corrosivity

Causes serious eye irritation.

Sensitising effects

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

STOT-single exposure

May cause drowsiness or dizziness. (propan-2-ol; isopropyl alcohol; isopropanol), (acetone; propan-2-one; propanone), (1-methoxy-2-propanol; monopropylene glycol methyl ether)

Severe effects after repeated or prolonged exposure

Repeated exposure may cause skin dryness or cracking.

Carcinogenic/mutagenic/toxic effects for reproduction

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

Aspiration hazard

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

Additional information on tests

This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

The product is not: ecotoxic.

CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol					
	Acute fish toxicity	LC50	8970 mg/l	96 h	Leuciscus idus (golden orfe)	IUCLID
	Acute crustacea toxicity	EC50	9714 mg/l	48 h	Daphnia magna (Big water flea)	IUCLID
67-64-1	acetone; propan-2-one; propanone					
	Acute fish toxicity	LC50	6210 mg/l	96 h	Pimephales promelas (fathead minnow)	OECD 203
	Acute crustacea toxicity	EC50	8800 mg/l	48 h	Daphnia pulex (water flea)	ECHA
	Crustacea toxicity	NOEC	> 1106 mg/l	28 d	Daphnia magna (Big water flea)	IUCLID
	Acute bacteria toxicity		(61150 mg/l)	0,5 h	Activated sludge	OECD 209
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether					
	Acute fish toxicity	LC50	20800 mg/l	96 h	Leuciscus idusPimephales promelas (fathead minnow)	ASTM Standard E729-8
	Acute algae toxicity	ErC50	> 1000 mg/l	96 h	Selenastrum capricornutum	OECD 201
	Acute crustacea toxicity	EC50	23300 mg/l	48 h	Daphnia magna (Big water flea)	IUCLID
	Crustacea toxicity	NOEC	>= 1000 mg/l	2 d	Daphnia magna (Big water flea)	OECD 202
	Acute bacteria toxicity		(> 1000 mg/l)	3 h	Activated sludge	OECD 209

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol			
	OECD 301E, C.4-B	> 95 %	28	IUCLID
	Readily biodegradable (according to OECD criteria).			
67-64-1	acetone; propan-2-one; propanone			
	Carbon dioxide-Concentration	90,9 %	28	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C
	Readily biodegradable (according to OECD criteria).			
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether			
	OECD 301E/ EEC 92/69/V, C.4-B	96 %	28	IUCLID
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

The product has not been tested.

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Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol	0,05
67-64-1	acetone; propan-2-one; propanone	-0,24
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether	-0,437

BCF

CAS No	Chemical name	BCF	Species	Source
67-64-1	acetone; propan-2-one; propanone	3		ECHA

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations**13.1. Waste treatment****Advice on disposal**

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

Waste disposal number of waste from 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 dangerous substances
Classified as hazardous waste.

Waste disposal number of used product

080199 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; wastes not otherwise specified

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by dangerous substances
Classified as hazardous waste.

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

SECTION 14: Transport information**Land transport (ADR/RID)****14.1. UN 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

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Classification code: F1
 Special provisions: 163 640D 650
 Limited quantity: 5 L
 Transport category: 2
 Hazard No: 33
 Tunnel restriction code: D/E

Other applicable information (land transport)

Excepted quantity: E2

Inland waterways transport (ADN)

14.1. UN 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



Classification code: F1
 Special provisions: 163 640D 650
 Limited quantity: 5 L

Other applicable information (inland waterways transport)

Excepted quantity: E2

Marine transport (IMDG)

14.1. UN 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



Special provisions: 163
 Limited quantity: 5 L
 EmS: F-E, S-E

Other applicable information (marine transport)

Excepted quantity: E2

Air transport (ICAO)

14.1. UN 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

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Special provisions:	A3 A72	
Limited quantity passenger:	1 L	
IATA-packing instructions - Passenger:		353
IATA-max. quantity - Passenger:		5 L
IATA-packing instructions - Cargo:		364
IATA-max. quantity - Cargo:		60 L

Other applicable information (air transport)

Excepted quantity: E2
 Passenger-LQ: Y341

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Warning: Combustible liquids.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

not applicable

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

1999/13/EC (VOC): 97 % (873 g/l)

Additional information

To follow: 850/2004/EC, 689/2008/EC

National regulatory information

Employment restrictions: Observe employment restrictions for adolescents.
 Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:
 acetone; propan-2-one; propanone
 1-methoxy-2-propanol; monopropylene glycol methyl ether

SECTION 16: Other information**Changes**

This data sheet contains changes from the previous version in section(s):
 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
 (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service
 LC50: Lethal concentration, 50%
 LD50: Lethal dose, 50%

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Relevant R-phrases (Number and full text)

Flammable.
Highly flammable.
Irritating to eyes.
Repeated exposure may cause skin dryness or cracking.
Vapors may cause drowsiness and dizziness.

Relevant H- and EUH-phrases (Number and full text)

Highly flammable liquid and vapor.
Flammable liquid and vapor.
Causes serious eye irritation.
May cause drowsiness or dizziness.
Repeated exposure may cause skin dryness or cracking.

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 material.

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