

according to Regulation (EC) No 1907/2006

**Bohle Metal Primer**

Revision date: 02.11.2017

Product code: BO5209488

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Bohle Metal Primer

**Further trade names**

BO 5209487, 500 ml

BO 5209488, 100 ml

BO 5209489, 1000 ml

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

metal adhesion promoter

**1.3. Details of the supplier of the safety data sheet**

Company name:	BOHLE AG	
Street:	Dieselstr. 10	
Place:	D-42781 Haan	
Telephone:	+49 2129 5568-0	Telefax: +49 2129 5568-282
e-mail:	info@bohle.de	
Contact person:	Klaus Nehren	Telephone: +49 2129 5568-276
e-mail:	MSDS@bohle.de	
Internet:	www.bohle-group.com	
Responsible Department:	Chemie	

**1.4. Emergency telephone number:**

Emergency CONTACT (24-Hour-Number):GBK GmbH +49 (0)6132-84463

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

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 vapour.

Causes serious eye irritation.

May cause drowsiness or dizziness.

**2.2. Label elements****Regulation (EC) No. 1272/2008****Hazard components for labelling**

propan-2-ol; isopropyl alcohol; isopropanol

**Signal word:** Danger**Pictograms:****Hazard statements**

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

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**Precautionary statements**

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER/doctor if you feel unwell.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P235	Keep cool.

**SECTION 3: Composition/information on ingredients**
**3.2. Mixtures**
**Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol			>95 %
	200-661-7	603-117-00-0	01-2119457558-25	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336			

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

**SECTION 4: First aid measures**
**4.1. Description of first aid measures**
**General information**

Take off immediately all contaminated clothing.

**After inhalation**

Move to fresh air. Consult a physician after significant exposure. If victim is unconscious but breathing: Victim to lie down in the recovery position, cover and keep him warm. Call a physician immediately.

**After contact with skin**

Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician.

**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, consult a specialist.

**After ingestion**

Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Give sodium sulfate as laxative (1 tablespoon in 1 glass of water) with plenty of activated coal.

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

No information available.

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

No information available.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**water spray, alcohol-resistant foam, dry chemical, carbon dioxide (CO<sub>2</sub>)**Unsuitable extinguishing media**

high volume water jet

**5.2. Special hazards arising from the substance or mixture**

In use may form flammable/explosive vapour-air mixture.

Fire may cause evolution of: Carbon monoxide, Carbon dioxide )

**5.3. Advice for firefighters**

In the event of fire, wear self-contained breathing apparatus. Standard procedure for chemical fires.

**Additional information**

Use water spray to cool unopened containers.

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

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

Use personal protective equipment. Keep people away from and upwind of spill/leak.

Ensure adequate ventilation.

Keep away from heat and sources of ignition.

Avoid contact with skin and eyes. Do not breathe vapour.

**6.2. Environmental precautions**

Do not flush into surface water or sanitary sewer system.

Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches.

Local authorities should be advised if significant spillages cannot be contained.

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

Provide adequate ventilation. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). 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**

Provide adequate ventilation as well as local exhaustion at critical locations.

Provide room air exhaust at ground level.

Avoid formation of aerosol. Do not breathe vapour/aerosol.

Avoid contact with the skin and the eyes.

**Advice on protection against fire and explosion**

Take precautionary measures against static discharges. Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Keep away from heat and sources of ignition. Do not smoke.

**7.2. Conditions for safe storage, including any incompatibilities**

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**Requirements for storage rooms and vessels**

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

**SECTION 8: Exposure controls/personal protection**
**8.1. Control parameters**
**Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
67-63-0	Propan-2-ol	400	999		TWA (8 h)	WEL
		500	1250		STEL (15 min)	WEL

**DNEL/DMEL values**

CAS No	Substance	Exposure route	Effect	Value
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol			
Consumer DNEL, long-term		oral	systemic	26 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	319 mg/kg bw/day
Worker DNEL, long-term		dermal	systemic	888 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	89 mg/m <sup>3</sup>
Worker DNEL, long-term		inhalation	systemic	500 mg/m <sup>3</sup>

**PNEC values**

CAS No	Substance	Value
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol	
Freshwater		140,9 mg/l
Freshwater (intermittent releases)		140,9 mg/l
Marine water		140,9 mg/l
Freshwater sediment		552 mg/kg
Marine sediment		552 mg/kg
Micro-organisms in sewage treatment plants (STP)		2251 mg/l
Soil		28 mg/kg

**8.2. Exposure controls**
**Appropriate engineering controls**

Even in case of a full release, due to the small amount of substances present, it is not expected that exposure limits will be reached. However it is the duty of the user to verify this and follow given exposure limits at the workplace.

**Protective and hygiene measures**

Avoid contact with skin, eyes and clothing. Provide adequate ventilation. Take off all contaminated clothing immediately. Keep away from food, drink and animal feedingstuffs. When using do not eat or drink. Do not smoke. Wash hands before breaks and at the end of workday.

**Eye/face protection**

safety glasses with side-shields conforming to EN166

**Hand protection**

The selected protective gloves have to satisfy the specifications of EU Directive 89/689/EEC and the standard EN 374 derived from it.

Glove material: Butyl caoutchouc (butyl rubber)  $\geq 0,5\text{mm}$ , NBR (Nitrile rubber)  $\geq 0,35\text{mm}$

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Breakthrough time (maximum wearing time)  $\geq 480$  min.**Skin protection**

impervious clothing

**Respiratory protection**

This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state:	liquid
Colour:	clear
Odour:	alcoholic

**Test method**

pH-Value (at 20 °C):	ca. 3
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**Changes in the physical state**

Melting point:	-89,5 °C
Initial boiling point and boiling range:	82 °C
Flash point:	12 °C

**Explosive properties**

In use, may form flammable/explosive vapour-air mixture.

Lower explosion limits:	2 vol. %
Upper explosion limits:	12 vol. %
Ignition temperature:	425 °C

**Auto-ignition temperature**

not auto-flammable

Vapour pressure: (at 20 °C)	48 hPa
Density (at 20 °C):	0,79 g/cm <sup>3</sup>
Water solubility: (at 20 °C)	soluble
Viscosity / dynamic: (at 20 °C)	2,4 mPa·s
Solvent content:	>95 %

**9.2. Other information**

Solid content:	ca. 4%
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**SECTION 10: Stability and reactivity****10.1. Reactivity**

None under normal processing.

**10.2. Chemical stability**

No decomposition if used as directed.

**10.3. Possibility of hazardous reactions**

Vapours may form explosive mixture with air.

**10.4. Conditions to avoid**

Keep away from heat and sources of ignition.  
Take action to prevent static discharges.

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**10.5. Incompatible materials**

strong acids and oxidizing agents

**10.6. Hazardous decomposition products**

None known.

**SECTION 11: Toxicological information**
**11.1. Information on toxicological effects**
**Acute toxicity**

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol				
	oral	LD50 mg/kg	4570	Rat	
	dermal	LD50 mg/kg	13400	Rabbit	
	inhalative (4 h) vapour	LC50	30 mg/l	Rat	

**STOT-repeated exposure**

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effect, such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

**SECTION 12: Ecological information**
**12.1. Toxicity**

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol					
	Acute fish toxicity	LC50 mg/l	9640	96 h	Pimephales promelas (fathead minnow)	
	Acute algae toxicity	ErC50 mg/l	>2000	72 h	Desmodesmus subspicatus	

**12.2. Persistence and degradability**

Readily biodegradable, according to appropriate OECD test.

**12.3. Bioaccumulative potential**
**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol	-0,16

**12.4. Mobility in soil**

The product evaporates readily.

**Further information**

Water hazard class (WGK) 1: slightly water endangering

Do not let product enter drains.

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

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### Advice on disposal

In accordance with local and national regulations.

### 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 hazardous substances  
Classified as hazardous waste.

### Waste disposal number of used product

140603 WASTE ORGANIC SOLVENTS, REFRIGERANTS AND PROPELLANTS (except 07 and 08); waste organic solvents, refrigerants and foam/aerosol propellants; other solvents and solvent mixtures  
Classified as hazardous waste.

### Waste disposal number of contaminated packaging

150102 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); plastic packaging

### Contaminated packaging

Non-contaminated packages may be recycled.

Contaminated packages must be completely emptied and can be re-used following proper cleaning.

cleaning agent : Water

## SECTION 14: Transport information

### Land transport (ADR/RID)

**14.1. UN number:** UN 1219  
**14.2. UN proper shipping name:** ISOPROPANOL (ISOPROPYL ALCOHOL)  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** II  
 Hazard label: 3



Classification code: F1  
 Special Provisions: 601  
 Limited quantity: 1 L  
 Excepted quantity: E2  
 Transport category: 2  
 Hazard No: 33  
 Tunnel restriction code: D/E

### Inland waterways transport (ADN)

**14.1. UN number:** UN 1219  
**14.2. UN proper shipping name:** ISOPROPANOL (ISOPROPYL ALCOHOL)  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** II  
 Hazard label: 3



Classification code: F1  
 Special Provisions: 601

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Limited quantity: 1 L  
 Excepted quantity: E2

**Marine transport (IMDG)**

**14.1. UN number:** UN1219  
**14.2. UN proper shipping name:** ISOPROPANOL  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** II  
 Hazard label: 3



Special Provisions: -  
 Limited quantity: 1 L  
 Excepted quantity: E2  
 EmS: F-E, S-D

**Air transport (ICAO-TI/IATA-DGR)**

**14.1. UN number:** UN1219  
**14.2. UN proper shipping name:** ISOPROPANOL  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** II  
 Hazard label: 3



Special Provisions: A180  
 Limited quantity Passenger: 1 L  
 Passenger LQ: Y341  
 Excepted quantity: E2  
 IATA-packing instructions - Passenger: 353  
 IATA-max. quantity - Passenger: 5 L  
 IATA-packing instructions - Cargo: 364  
 IATA-max. quantity - Cargo: 60 L

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: no

**14.6. Special precautions for user**

none

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

not relevant

**SECTION 15: Regulatory information**

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

**National regulatory information**

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).  
 Water contaminating class (D): 1 - slightly water contaminating

**15.2. Chemical safety assessment**

For this substance a chemical safety assessment has not been carried out.



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**SECTION 16: Other information****Relevant H and EUH statements (number and full text)**

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

**Further Information**

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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