Revision: 20.01.2023

Safety data sheet according to UK REACH Regulation

Printing date 20.01.2023

Version number 21 (replaces version 20)

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

- · 1.1 Product identifier
 - · Trade name Jowat Primer 406.28
- 1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Primer
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Jowat SE

Ernst-Hilker-Str. 10 - 14; D - 32758 Detmold

Fon +49 (0)5231 749 0 e-mail: info@jowat.de

www.jowat.de

Department issuing data specification sheet:

Environmental management

Tel. +49 5231 749 -218 / -211 / -5460 / -5374

e-mail: umweltmanagement@jowat.de

Department providing the information:

Jowat UK Ltd.

Lymedale Business Centre Lymedale Business Park

Hooters Hall Road

Newcastle-under-Lyme

Staffordshire ST5 9QF

Phone: +44 1782 565265 E-mail: nick.orton@jowat.co.uk

· 1.4 Emergency telephone number:

Members of the public seeking specific information on poisons should contact:

In England and Wales: NHS 111 - dial 111

In Scotland: NHS 24 - dial 111

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
 - · Classification according to Regulation (EC) No 1272/2008



Flam. Liq. 2 H225 Highly flammable liquid and vapour.



Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

- 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the GB CLP regulation.

· Hazard pictograms





GHS02 GHS07

· Signal word Danger

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· Hazard-determining components of labelling:

butanone

· Hazard statements

H225 Highly flammable liquid and vapour.

H319 Causes serious eye 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.

P241 Use explosion-proof [electrical/ventilating/lighting] equipment.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin

with water [or shower].

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents / container to approved waste disposal or recycling in

accordance with national regulations.

· Additional information:

EUH066 Repeated exposure may cause skin dryness or cracking.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

PBT: Not applicable.vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· **Description:** Solvent mixture with additives.

Dangerous components:		
CAS: 78-93-3 EINECS: 201-159-0 registration number: 01-2119457290-43 01-2119943742-35	butanone Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336, EUH066	>50%

· Additional information

If any R-phrases (risk-phrases) are listed, please refer for the exact wording to section 16.

SECTION 4: First aid measures

· 4.1 Description of first aid measures

General information

Instantly remove any clothing soiled by the product.

Take affected persons into the open air.

- · After inhalation Supply fresh air; consult physician in case of symptoms.
- After skin contact Instantly wash with water and soap and rinse thoroughly.
- · After eye contact

Rinse opened eye for several minutes under running water. If symptoms persist, consult physician.

· After swallowing In case of persistent symptoms consult physician.

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

No further relevant information available.

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

If swallowed or in case of vomiting, danger of entering the lungs

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents

Foam extinguishing agent

CO2, extinguishing powder or water jet. Fight larger fire with alcohol-resistant foam.

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• For safety reasons unsuitable extinguishing agents Water with a full water jet.

· 5.2 Special hazards arising from the substance or mixture

Can be released in case of fire

Carbon monoxide (CO)

5.3 Advice for firefighters

Protective equipment:

Wear self-contained breathing apparatus.

Do not inhale explosion gases or combustion gases.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing.

6.2 Environmental precautions:

Do not allow product to reach sewage system or water bodies.

Prevent material from reaching sewage system, holes and cellars.

Prevent from spreading (e.g. by damming-in or oil barriers).

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

· 6.4 Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Store in cool, dry place in tightly closed containers.

Ensure good ventilation/extraction system at the workplace.

Open and handle container with care.

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Use only in explosion-proof area.

Highly volatile, flammable constituents are released during processing.

Fumes can combine with air to form an explosive mixture.

Flammable mixtures may be formed in empty containers.

· 7.2 Conditions for safe storage, including any incompatibilities

· Storage

- Requirements to be met by storerooms and containers: Store in cool location.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Protect against frost.

Keep container tightly sealed.

Store in cool, dry conditions in well sealed containers.

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

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Components with critical values that require monitoring in the workplace:

78-93-3 butanone

WEL Short-term value: 899 mg/m³, 300 ppm Long-term value: 600 mg/m³, 200 ppm

Sk, BMGV

Regulatory information WEL: EH40/2020

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· Ing	· Ingredients with biological limit values:	
78-93-	78-93-3 butanone	
	BMGV 70 µmol/L Medium: urine Sampling time: post shift Parameter: butan-2-one	

- · Regulatory information BMGV: EH40/2011
- · Additional information: The lists that were valid during the compilation were used as basis.

· 8.2 Exposure controls

- Appropriate engineering controls No further data; see item 7.
- · Additional information about design of technical systems: No further data; see item 7.
- Individual protection measures, such as personal protective equipment
 - · General protective and hygienic measures

Standard precautionary measures for handling chemicals are to be observed.

Keep away from food, beverages and animal feed.

Instantly remove any soiled and impregnated garments.

Wash hands during breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

Do not eat or drink while working.

Breathing equipment:

Use breathing protection in case of insufficient ventilation (EN 14387).

Short term filter device:

Filter AX (boining point < 61 °C); Filter A (boiling point > 60 °C).

Only when applied by spray methods, if no adequate extraction system is in place (EN 149). Filter A/P2

- Hand protection Impervious gloves (EN 374).
- · Material of gloves Butyl rubber, BR
- Penetration time of glove material

The exact time limit until penetration has to be found out from the manufacturer of the protective gloves; please ensure that this value is not exceeded.

- Gloves made of the following material are suitable for the permanent contact with this material in work areas which do not have an above-average risk of injury (e.g. laboratories): LLDPE gloves
- For the permanent contact gloves made of the following materials are suitable: LLDPE gloves
- · For permanent contact of max. 15 minutes, gloves made of the following materials are suitable:

Butyl rubber, BR

To protect against splashing, gloves made of the following materials are suitable:

Fluorocarbon rubber (Viton)

Not suitable are gloves made of the following materials:

Natural rubber, NR

Chloroprene rubber, CR

Leather gloves

Strong gloves

· Eye/face protection

Safety glasses recommended during refilling and spraying.

Safety glasses

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

General Information

· Physical state

Fluid

· Colour: According to product specification

Smell: Characteristic

Odour threshold: Not determined.

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	(Contd. from page 4)
Melting point/freezing point:	Not determined
Boiling point or initial boiling point and boilin	g
range	80 °C
· Flammability	Highly flammable.
Lower and upper explosion limit	
Lower:	1.8 Vol %
· Upper:	11.5 Vol %
· Flash point:	-4 °C
· Ignition temperature:	514 °C
· Decomposition temperature:	Not determined.
· pH	Not determined.
· Viscosity:	
· Kinematic viscosity	Not determined.
dynamic at 20 °C:	40 mPas
Solubility	
· Water:	Not miscible or difficult to mix
Partition coefficient n-octanol/water (log value	
Vapour pressure at 20 °C:	101 hPa
Density and/or relative density	0.05 / 3
Density at 20 °C	0.85 g/cm³
Relative density	Not determined.
· Vapour density	Not determined.
· 9.2 Other information	
· VOC - Volatile Organic Compounds	
· European Union	88.08 %
· Switzerland	88.08 %
 U.S.A (less water and less exempts) 	748.7 g/l / 6.25 lb/gal
· Appearance:	
· Form:	Fluid
Important information on protection of health	
and environment, and on safety.	
· Spontaneous combustion:	Product does not undergo spontaneous
- Evalosivo proportios	combustion.
· Explosive properties:	Product is not explosive. However, formation of explosive air/steam mixtures is possible.
· Solvent content:	explosive all/stealli illixtures is possible.
· Organic solvents:	88.1 %
· Solid content:	10.5 %
· Change in condition	10.5 /6
· Evaporation rate	Not determined.
· ·	The Castollimited.
Information with regard to physical hazard	
classes	not applicable
· Explosives · Flammable gases	not applicable not applicable
· Aerosols	not applicable
· Oxidising gases	not applicable
· Gases under pressure	not applicable
· Flammable liquids	Highly flammable liquid and vapour.
· Flammable solids	not applicable
Self-reactive substances and mixtures	not applicable
· Pyrophoric liquids	not applicable
Pyrophoric solids	not applicable
Self-heating substances and mixtures	not applicable
· Substances and mixtures, which emit	
flammable gases in contact with water	not applicable
· Oxidising liquids	not applicable
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· Oxidising solids	not applicable	
· Organic peroxides	not applicable	
Corrosive to metals	not applicable	
· Desensitised explosives	not applicable	

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability
 - Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions

Forms explosive gas mixture with air

Develops readily flammable gases / fumes

Reacts with strong acids and alkali

Used empty containers may contain product gases which form explosive mixtures with air

Forms explosive gas mixture with air

Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomised

- · 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products:

Hydrocarbons

Inflammable gases/vapours

Carbon monoxide and carbon dioxide

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.

· LD/LC50 values that are relevant for classification:		
78-93-3 bı	78-93-3 butanone	
Oral	LD50 oral	2,193 mg/kg (rat) (OECD 423)
Dermal	LD50 dermal	>5,000 mg/kg (rabbit) (OECD 402)
Inhalative	LC50 / 4 h	40 mg/l (mouse)
		34.5 mg/l (rat)

- to the eye: Causes serious eye irritation.
- STOT-single exposure May cause drowsiness or dizziness.
- 11.2 Information on other hazards

· Endocrine disrupting properties	
78-93-3 butanone	List II

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic to	· Aquatic toxicity:	
78-93-3 buta	78-93-3 butanone	
LC50 / 96 h	LC50 / 96 h >3,000 mg/l (orfe (ide)) (OECD 203)	
	2,993 mg/l (fathead minnow)	
LC50 / 48 h	∟C50 / 48 h 1,723 mg/l (water flea) (OECD 202)	
LC0	4,400-4,800 mg/l (orfe (ide))	
1,150 mg/l (pseudomonas putida)		
EC50 / 48 h	>100 mg/l (water flea)	
EC0	2,000-2,600 mg/l (water flea)	
IC0 4,300 mg/l (green algae)		

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- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · 12.5 Results of PBT and vPvB assessment
 - · PBT: Not applicable.
 - · vPvB: Not applicable.
- · 12.6 Endocrine disrupting properties For information on endocrine disrupting properties see section 11.
- · 12.7 Other adverse effects
 - Additional ecological information:
 - · General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water.

Do not allow the product to reach ground water, open water or the sewer system, undiluted or in large quantites.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Hand over to disposers of hazardous waste.

· Uncleaned containers/packaging material:

· Recommendation:

Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

Packaging can be reused or recycled after cleaning.

Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.

Packaging with cured adhesive residues can be recycled.

Packaging with cured adhesive residues can be treated as household waste.

Packaging with uncured adhesive residues must be disposed of as hazardous waste.

Recommended cleaning agent: Solvent naphtha

SECTION 14: Transport information

· 14.1 UN number or ID number · ADR, IMDG, IATA	UN1133	
· 14.2 UN proper shipping name · ADR · IMDG, IATA	1133 ADHESIVES ADHESIVES	
· 14.3 Transport hazard class(es)		
· ADR		
· Class	3 (F1) Flammable liquids.	
· Label	3	
· IMDG, IATA		
· Class	3 Flammable liquids.	
· Label	3	

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· 14.4 Packing group · ADR, IMDG, IATA	II
· 14.5 Environmental hazards: · Marine pollutant:	No
· 14.6 Special precautions for user · Kemler Number: · EMS Number: · Stowage Category	Warning: Flammable liquids. 33 F-E,S-D B
· 14.7 Maritime transport in bulk according instruments	g to IMO Not applicable.
· Transport/Additional information:	
· ADR · Limited quantities (LQ) · Excepted quantities (EQ) · Transport category · Tunnel restriction code	5L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml 2 D/E
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	5L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1133 ADHESIVES, 3, II

SECTION 15: Regulatory information

- \cdot 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
 - **Chemical safety assessment**
 - · Seveso category P5c FLAMMABLE LIQUIDS
 - · Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t
 - Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has been carried out.

SECTION 16: Other information

These data are based on our present knowledge. They shall, however, not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

All standard industrial precautions apply, concerning protection of health, and safe handling. The recommendations have to be examined in the context of the application for which the product is intended, and observed as necessary.

· Relevant phrases

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

EUH066 Repeated exposure may cause skin dryness or cracking.

· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

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IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised 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 (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

* Data modified in comparison to the previous version.

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Annex: Exposure scenario 1

- · Product category PC9a Coatings and paints, thinners, paint removers
- Process category PROC14 Tabletting, compression, extrusion, pelletisation, granulation
- · Environmental release category

ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)

- · Notes Do not use for private / domestic purposes (household).
- Description of the activities / processes covered in the Exposure Scenario

See section 1 of the annex to the Safety Data Sheet.

- · Conditions of use
 - · Duration and frequency 8hrs (full working shift).
- · Physical parameters
 - · Physical state Fluid
 - · Concentration of the substance in the mixture The substance is main component.
- Other operational conditions
 - · Other operational conditions affecting worker exposure

Observe section 6 of the Safety Data Sheet (Accidental release measures).

- · Risk management measures
 - Worker protection
 - Organisational protective measures

Ensure good ventilation. This can be achieved by using a local exhaustion or general exhaust system. If these measures are insufficient to keep the solvent vapour concentration below the workplace limit, wear an adequate respiratory protective device.

- · Technical protective measures Ensure good ventilation/extraction system at the workplace.
- Personal protective measures

Protective work clothing.

Wear suitable protective gloves and protective goggles /face protection during work.

Use breathing protection in case of insufficient ventilation (EN 149).

Avoid contact with the eyes and skin.

- Measures for consumer protection Ensure adequate labelling.
- **Environmental protection measures**
 - · Water Do not allow to reach ground water, water bodies or sewage system.
 - \cdot Soil Avoid contact with soil and / or ground water during the application.
 - Notes In case of unintended release of the product: See section 6 of the Safety Data Sheet.

Disposal measures

Must not be disposed of with household waste. Do not allow to reach sewage system.

Disposal must be made according to official regulations.

Ensure that waste is collected and contained.

· Disposal procedures

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Waste type Partially emptied and uncleaned packaging
- **Exposure estimation**
- Worker (inhalation)

Detailed information on the exposure estimation can be found at http://www.ecetoc.org/tra.

- · Consumer Not applicable
- · Guidance for downstream users No further relevant information available.

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Annex: Exposure scenario 2

· Sector of Use

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

- Product category PC9a Coatings and paints, thinners, paint removers
- Process category

PROC11 Non industrial spraying

PROC19 Manual activities involving hand contact

· Environmental release category

ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)

ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)

· **Notes** Do not use for private / domestic purposes (household).

Description of the activities / processes covered in the Exposure Scenario

See section 1 of the annex to the Safety Data Sheet.

· Conditions of use

· Duration and frequency 8hrs (full working shift).

· Physical parameters

- · Physical state Fluid
- · Concentration of the substance in the mixture The substance is main component.
- Other operational conditions

Other operational conditions affecting worker exposure

Observe section 6 of the Safety Data Sheet (Accidental release measures).

· Risk management measures

· Worker protection

Instantly remove any clothing soiled by the product.

Take affected persons into the open air.

· Organisational protective measures

Ensure good ventilation. This can be achieved by using a local exhaustion or general exhaust system. If these measures are insufficient to keep the solvent vapour concentration below the workplace limit, wear an adequate respiratory protective device.

Technical protective measures Ensure good ventilation/extraction system at the workplace.

Personal protective measures

Protective work clothing.

Wear suitable protective gloves and protective goggles /face protection during work.

Use breathing protection in case of insufficient ventilation (EN 149).

Avoid contact with the eyes and skin.

Measures for consumer protection Ensure adequate labelling.

Environmental protection measures

- · Water Do not allow to reach ground water, water bodies or sewage system.
- · Soil Avoid contact with soil and / or ground water during the application.
- · Notes In case of unintended release of the product: See section 6 of the Safety Data Sheet.

· Disposal measures

Must not be disposed of with household waste. Do not allow to reach sewage system.

Disposal must be made according to official regulations.

Ensure that waste is collected and contained.

Disposal procedures

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· Waste type Partially emptied and uncleaned packaging

Exposure estimation

Worker (inhalation)

Detailed information on the exposure estimation can be found at http://www.ecetoc.org/tra.

· Consumer Not applicable

• Guidance for downstream users No further relevant information available.