

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

1.1 Product identifier	
Product name	: Jotun Thinner No. 12
EC number	: Not available.
CAS number	: 112-07-2
Product code	: 2320
Product description	: Solvent.
Product type	: Liquid.
Other means of identification	: Not available.

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

Use in coatings - Industrial use Use in coatings - Professional use

### 1.3 Details of the supplier of the safety data sheet

Jotun A/S P.O.Box 2021 3202 Sandefjord Norway

Tel: + 47 33 45 70 00 Fax: +47 33 45 72 42 E-mail: SDSJotun@jotun.no

### 1.4 Emergency telephone number

Norwegian National Poison Centre: +47 22 59 13 00

# **SECTION 2: Hazards identification**

### 2.1 Classification of the substance or mixture

Product definition : Mono-constituent substance

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

Acute Tox. 4, H312 Acute Tox. 4, H332

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements Hazard pictograms	
Signal word	: Warning.
Hazard statements <u>Precautionary statements</u>	: H312 + H332 - Harmful in contact with skin or if inhaled.

# **SECTION 2: Hazards identification**

	-							
General	:	Not applica	ble.					
Prevention	1	P280 - Wea P261 - Avoi			d protectiv	e clothing.		
Response	:					CENTER or d		
Storage	:	Not applica	ble.					
Disposal	1		ose of conte d internation			accordance w	rith all local,	regional,
Hazardous ingredients	1	2-butoxyeth	yl acetate					
Supplemental label elements	:	Not applica	ble.					
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	Not applica	ble.					
Special packaging requirem	nen	<u>ts</u>						
Containers to be fitted with child-resistant fastenings	:	Not applica	ble.					
Tactile warning of danger	;	Not applica	ble.					
2.3 Other hazards								
Product meets the criteria	1	PBT	Р	В	Т	vPvB	vP	vB
for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII		No	N/A	N/A	No	N/A	N/A	N/A
Other hazards which do	1	None know	n					

Other hazards which do not result in classification

: None known.

# **SECTION 3: Composition/information on ingredients**

3.1 Substances

: Mono-constituent substance

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
2-butoxyethyl acetate	EC: 203-933-3 CAS: 112-07-2 Index: 607-038-00-2	100	Acute Tox. 4, H312 Acute Tox. 4, H332	ATE [Dermal] = 1500 mg/kg ATE [Inhalation (vapours)] = 11 mg/ I	[1]
			See Section 16 for the full text of the H statements declared above.		

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

Туре

[1] Constituent

Occupational exposure limits, if available, are listed in Section 8.

# **SECTION 4: First aid measures**

4.1 Description of first aid measures				
General	: In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.			
Eye contact	<ul> <li>Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.</li> </ul>			
Inhalation	: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.			
Skin contact	<ul> <li>Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.</li> </ul>			
Ingestion	: If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.			
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.			

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

Over-exposure signs/symptoms				
Eye contact	: No specific data.			
Inhalation	: No specific data.			
Skin contact	: No specific data.			
Ingestion	: No specific data.			

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

Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	No specific treatment.

### See toxicological information (Section 11)

# **SECTION 5: Firefighting measures**

5.1 Extinguishing media		
Suitable extinguishing media	Recommended: alcohol-resistant foam, CO <sub>2</sub> , powders, water spray.	
Unsuitable extinguishing media	Do not use water jet.	
5.2 Special hazards arising fi	the substance or mixture	
Hazards from the substance or mixture	Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.	
Hazardous combustion products	Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.	
5.3 Advice for firefighters		
Special protective actions for fire-fighters	Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.	0
Special protective equipment for fire-fighters	Appropriate breathing apparatus may be required.	

Date	of	issue	/Date	of	revision	
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# **SECTION 6: Accidental release measures**

6.1 Personal precautions, protective equipment and emergency procedures				
For non-emergency personnel	;	Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist. Refer to protective measures listed in sections 7 and 8.		
For emergency responders	:	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".		
6.2 Environmental precautions	:	Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.		
6.3 Methods and material for containment and cleaning up	:	Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Preferably clean with a detergent. Avoid using solvents.		
6.4 Reference to other sections	:	See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.		

# **SECTION 7: Handling and storage**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 7.1 Precautions for safe handling

Protective measures	: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.

### Notes on joint storage

Keep away from: oxidising agents, strong alkalis, strong acids.

### Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

See Technical Data Sheet / packaging for further information.

# 7.3 Specific end use(s)Recommendations: Not available.Industrial sector specific: Not available.solutions

# **SECTION 8: Exposure controls/personal protection**

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

### 8.1 Control parameters

### **Occupational exposure limits**

Product/ingredient name	Exposure limit values
2-butoxyethyl acetate	FOR-2011-12-06-1358 (Norway, 6/2021). Absorbed through skin. Notes: indicative limit value TWA: 10 ppm 8 hours. TWA: 65 mg/m <sup>3</sup> 8 hours.
procedures European Stan assessment of values and me atmospheres - of exposure to (Workplace atr for the measure	uld be made to monitoring standards, such as the following: dard EN 689 (Workplace atmospheres - Guidance for the exposure by inhalation to chemical agents for comparison with limit asurement strategy) European Standard EN 14042 (Workplace Guide for the application and use of procedures for the assessment chemical and biological agents) European Standard EN 482 mospheres - General requirements for the performance of procedures ement of chemical agents) Reference to national guidance methods for the determination of hazardous substances will also be

### **DNELs/DMELs**

Product/ingredient name	Туре	Exposure	Value	Population	Effects
2-butoxyethyl acetate	DNEL	Long term Oral	8.6 mg/kg bw/day	General population	Systemic
	DNEL	Short term Oral	36 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	72 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	80 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	102 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	120 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	133 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	169 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	200 mg/m <sup>3</sup>	General population	Local
	DNEL	Short term Inhalation	333 mg/m³	Workers	Local

### **PNECs**

No PNECs available

8.2 Exposure controls						
Appropriate engineering controls	achieved by these are no	equate ventilation. Where the use of local exhaus ot sufficient to maintain of ow the OEL, suitable res	t ventilation and good concentrations of part	l general extract iculates and sol	tion. If	
Individual protection meas	ures					
Hygiene measures	eating, smo Appropriate Wash conta	s, forearms and face the king and using the lavate techniques should be us minated clothing before vers are close to the worl	ory and at the end of sed to remove potent reusing. Ensure tha	the working per ially contaminat	iod. ed cloth	ning.
Date of issue/Date of revision	: 24.03.2023	Date of previous issue	: 23.03.2023	Version	: 1.01	5/12

### **SECTION 8: Exposure controls/personal protection**

Eye/face protection	: Safety eyewear complying to ISO 16321-1:2022 should be used when a risk
	assessment indicates this is necessary to avoid exposure to liquid splashes, mists,
	gases or dusts. If contact is possible, the following protection should be worn,
	unless the assessment indicates a higher degree of protection: safety glasses with
	side-shields.

### **Skin protection**

### Hand protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

### <u>Gloves</u>

Wear suitable gloves tested to ISO 374-1:2016.

Recommended, gloves(breakthrough time) > 8 hours: butyl rubber (> 0.4 mm)

Not recommended, gloves(breakthrough time) < 1 hour: nitrile rubber (> 0.4 mm), PVC (> 0.5 mm), fluor rubber (> 0.35 mm)

For right choice of glove materials, with focus on chemical resistance and time of penetration, seek advice by the supplier of chemical resistant gloves.

The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

Body protection	: Personnel should wear antistatic clothing made of natural fibres or of high- temperature-resistant synthetic fibres.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: If workers are exposed to concentrations above the exposure limit, they must use a respirator according to EN 140. Use respiratory mask with charcoal and dust filter when spraying this product, according to EN 14387 (as filter combination A2-P2). In confined spaces, use compressed-air or fresh-air respiratory equipment. When use of roller or brush, consider use of charcoalfilter.
Environmental exposure controls	: Do not allow to enter drains or watercourses.

### SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### 9.1 Information on basic physical and chemical properties

Appearance	
Physical state	: Liquid.
Colour	: Clear.
Odour	: Not available.
Odour threshold	: Not applicable.
Melting point/freezing point	: Not applicable.
Initial boiling point and boiling range	: Lowest known value: 193 to 194°C (379.4 to 381.2°F)(2-butoxyethyl acetate).
Flammability	: Not applicable.

# SECTION 9: Physical and chemical properties

-		
Lower and upper explosion limit	1	1.3 - 6.8%
Flash point	:	Closed cup: 78°C
Auto-ignition temperature	:	Lowest known value: 340°C (644°F) (2-butoxyethyl acetate).
Decomposition temperature	1	Not available.
рН	:	4
Viscosity	:	Kinematic (40°C): >20.5 mm²/s
Solubility in water	:	Not available.
Partition coefficient: n-octanol/ water	:	Not available.
Vapour pressure	:	Highest known value: 0.03 kPa (0.2 mm Hg) (at 20°C) (2-butoxyethyl acetate).
Evaporation rate	:	0.03 (2-butoxyethyl acetate) compared with butyl acetate
Density	:	0.94 g/cm <sup>3</sup>
Vapour density	:	Highest known value: 5.5 (Air = 1) (2-butoxyethyl acetate).
Explosive properties	1	Not available.
Oxidising properties	1	Not available.
Particle characteristics		
Median particle size	:	Not applicable.

### 9.2 Other information

No additional information.

# **SECTION 10: Stability and reactivity**

10.1 Reactivity	No spec	ific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	Stable u	nder recommended storage and handling conditions (see Section 7).
10.3 Possibility of hazardous reactions	Under n	ormal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	When exproducts	xposed to high temperatures may produce hazardous decomposition
10.5 Incompatible materials		/ay from the following materials to prevent strong exothermic reactions: g agents, strong alkalis, strong acids.
10.6 Hazardous decomposition products		osition products may include the following materials: carbon monoxide, lioxide, smoke, oxides of nitrogen.

# **SECTION 11: Toxicological information**

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

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2-butoxyethyl acetate	LD50 Dermal	Rabbit	1500 mg/kg	-

### Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
2-butoxyethyl acetate	N/A	1500.0	N/A	11	N/A
2-butoxyethyl acetate	N/A	1500	N/A	11	N/A

Irritation/Corrosion

# **SECTION 11: Toxicological information**

	-9				
Product/ingredient name	Result	Species	Score	Exposure	Observation
2-butoxyethyl acetate	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-

### **Sensitisation**

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

### **Mutagenicity**

No known significant effects or critical hazards.

### **Carcinogenicity**

No known significant effects or critical hazards.

### **Reproductive toxicity**

**Developmental effects** : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

### **Teratogenicity**

No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

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

### Specific target organ toxicity (repeated exposure)

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

### Aspiration hazard

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

### 11.2 Information on other hazards

**11.2.1 Endocrine disrupting properties** 

Not available.

### **11.2.2 Other information**

**Conclusion/Summary** 

Not available.

### **SECTION 12: Ecological information**

### 12.1 Toxicity

: No known significant effects or critical hazards.

### 12.2 Persistence and degradability

**Conclusion/Summary** : Not available.

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
2-butoxyethyl acetate	1.51	-	low

### 12.4 Mobility in soil

Soil/water partition coefficient (Koc)	: Not available.
Mobility	: Not available.

### 12.5 Results of PBT and vPvB assessment

Jotun Thinner No. 12								
SECTION 12: Ecological information								
Product/ingredient name	PBT	Р	В	Т	vPvB	vP	vB	
2-butoxyethyl acetate	No	N/A	N/A	No	N/A	N/A	N/A	

### 12.6 Endocrine disrupting properties

Not available.

### 12.7 Other adverse effects

No known significant effects or critical hazards.

### **SECTION 13: Disposal considerations**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 13.1 Waste treatment methods

Product	
Methods of disposal	: The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.
Hazardous waste	: 🛛 es.
Disposal considerations	: Do not allow to enter drains or watercourses. Dispose of according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

### European waste catalogue (EWC)

The European Waste Catalogue classification of this product, when disposed of as waste, is:

Waste code	Waste designation		
<b>Ø</b> 8 01 11*	Waste paint and varnish containing organic solvents or other dangerous substances		
Packaging			
Methods of disposal	: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.		
Disposal considerations	<ul> <li>Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Dispose of containers contaminated by the product in accordance with local or national legal provisions.</li> </ul>		

Type of packaging	European waste catalogue (EWC)	
CEPE Guidelines	15 01 10* packaging containing residues of or contaminated by hazardous substances	
Special precautions	This material and its container must be disposed of in a safe way. Care should taken when handling emptied containers that have not been cleaned or rinsed Empty containers or liners may retain some product residues. Avoid dispersal spilt material and runoff and contact with soil, waterways, drains and sewers.	

# **SECTION 14: Transport information**

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.

user

14.6 Special precautions for : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Maritime transport in : Not available. bulk according to IMO instruments

# SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

**Annex XIV** 

None of the components are listed.

### Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	Not applicable.
Other EU regulations		
VOC	:	The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the product label and/or technical data sheet for further information.
VOC for Ready-for-Use Mixture	:	Not available.
Industrial emissions (integrated pollution prevention and control) - Air	:	Not listed
Industrial emissions (integrated pollution prevention and control) - Water	:	Not listed

SECTION 15: Regulatory information					
Ozone depleting substances (1005/2009/EU)					
Not listed.					
Prior Informed Consent (PIC) (649/2012/EU)					
Not listed.					
Persistent Organic Pollutants Not listed.					
Seveso Directive					
This product is not controlled under the Seveso Directive.					
National regulations					
Industrial use : The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.					
<u>Norway</u>					
Product registration : 634382 number					
International regulations					
Chemical Weapon Convention List Schedules I, II & III Chemicals					
Not listed.					
Montreal Protocol					
Not listed.					
Stockholm Convention on Persistent Organic Pollutants					
Not listed.					
Rotterdam Convention on Prior Informed Consent (PIC) Not listed.					
UNECE Aarhus Protocol on POPs and Heavy Metals					
Not listed.					
<b>15.2 Chemical safety</b> : No Chemical Safety Assessment has been carried out. assessment					
SECTION 16: Other information					

Indicates information that has changed from previously issued version.

Abbreviations and acronyms	<ul> <li>ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement N/A = Not available PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number SGG = Segregation Group</li> </ul>
Due en deux anno d'An aloria	vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Acute Tox. 4, H312	Calculation method
Acute Tox. 4, H332	Calculation method

### Full text of abbreviated H statements

Date of issue/Date of revision

### **SECTION 16: Other information**

	larmful in contact with skin. larmful if inhaled.				
Full text of classifi	cations [CLP/GHS]				
Acute Tox. 4	ACUTE TOXICITY - Category 4				
Date of printing	: 24.03.2023				
Date of issue/ Date revision	e of : 24.03.2023				
Date of previous is	sue : 23.03.2023				
Version	: 1.01				
Notice to reader					

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