

Conforms to Regulation (EC) No. 453/2010 (REACH), Annex II, as amended by Regulation (EU) No. 2015/830

**SAFETY DATA SHEET****Balloxy HB Light Comp B****SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

**Product name** : Balloxy HB Light Comp B  
**Product code** : 386  
**Product description** : Paint.  
**Product type** : Liquid.  
**Other means of identification** : Not available.

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

Uses in Coatings - Industrial use  
 Uses in Coatings - Professional use

See Annex to the Safety data sheet for additional information in the Exposure Scenario(s).

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

MANUFACTURER/SUPPLIER:  
 Jotun Paints (Europe) Ltd.  
 Stather Road  
 Flixborough, Scunthorpe  
 North Lincolnshire  
 DN15 8RR  
 England

Tel: +44 17 24 40 00 00  
 Fax: +44 17 24 40 01 00  
 SDSJotun@jotun.com

**1.4 Emergency telephone number**

Contact NHS Direct; phone 0845 4647 or 111. Open 24/7.

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture**

**Product definition** : Mixture

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

Skin Corr. 1A, H314  
 Eye Dam. 1, H318  
 Skin Sens. 1, H317  
 Aquatic Chronic 3, H412

**2.2 Label elements****Hazard pictograms**

**Signal word** : Danger.


**Date of issue** : 09.01.2017

1/16

**Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - United Kingdom (UK)**

**Balloxy HB Light Comp B**

**SECTION 2: Hazards identification**


- Hazard statements** : Causes severe skin burns and eye damage.  
 May cause an allergic skin reaction.  
 Harmful to aquatic life with long lasting effects.
- Precautionary statements**
- General** : Not applicable.
- Prevention** : Wear protective gloves. Wear eye or face protection. Wear protective clothing.  
 Avoid release to the environment. Do not breathe vapour or spray.
- Response** : IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician. If skin irritation or rash occurs: Get medical attention.
- Storage** : Store locked up.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Hazardous ingredients** : -aminomethyl-3,5,5-trimethylcyclohexylamine  
 2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine  
 Hydrocarbons, C9-unsaturated, polymerized
- Supplemental label elements** : Not applicable.

**2.3 Other hazards**

- Other hazards which do not result in classification** : None known.

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

**Substance/mixture** : Mixture

Product/ingredient name	Identifiers	%	Classification Regulation (EC) No. 1272/2008 [CLP]	Type	Notes
 enzyl alcohol	REACH #: 01-2119492630-38 EC: 202-859-9 CAS: 100-51-6	≥10 - ≤25	Acute Tox. 4, H302 Acute Tox. 4, H332	[1]	-
3-aminomethyl-3,5,5-trimethylcyclohexylamine	REACH #: 01-2119514687-32 EC: 220-666-8 CAS: 2855-13-2 Index: 612-067-00-9	≤14	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412	[1]	-
2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	REACH #: 01-2119560598-25 EC: 247-063-2 CAS: 25513-64-8	≤7,3	Acute Tox. 4, H302 Skin Corr. 1A, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412	[1]	-
hydrocarbons, C9, aromatics, (<0.1% Benzene)	REACH #: 01-2119455851-35 EC: 918-668-5 CAS: 64742-95-6	≤5	Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	[1] [2]	H-P
Hydrocarbons, C9-unsaturated, polymerized	REACH #: 01-2119555292-40 CAS: 71302-83-5	≤3	Skin Sens. 1, H317 Aquatic Chronic 3, H412	[1]	-

**Date of issue** : 09.01.2017

**Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - United Kingdom (UK)****Balloxy HB Light Comp B****SECTION 3: Composition/information on ingredients**

			<b>See Section 16 for the full text of the H statements declared above.</b>		
--	--	--	---	--	--

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern

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.
- 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** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
- 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**

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains 3-aminomethyl-3,5,5-trimethylcyclohexylamine, 2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine, Hydrocarbons, C9-unsaturated, polymerized. May produce an allergic reaction.

**Potential acute health effects**

- Eye contact** : Causes serious eye damage.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes severe burns. May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

**Date of issue** : 09.01.2017**3/16**

**Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - United Kingdom (UK)****Balloxy HB Light Comp B****SECTION 4: First aid measures****Over-exposure signs/symptoms**

- Eye contact** : Adverse symptoms may include the following:  
pain  
watering  
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur
- Ingestion** : Adverse symptoms may include the following:  
stomach pains

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

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.

**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 from the substance or mixture**

- Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
metal oxide/oxides

**5.3 Advice for firefighters**

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

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

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- 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".

**Date of issue** : 09.01.2017**4/16**

**Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - United Kingdom (UK)****Balloxy HB Light Comp B****SECTION 6: Accidental release measures**

- 6.2 Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
- 6.3 Methods and material for containment and cleaning up**
- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.
- 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**

Due to the organic solvents content of the mixture:

Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits.

In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.

Keep away from heat, sparks and flame. No sparking tools should be used.

Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Put on appropriate personal protective equipment (see Section 8).

Never use pressure to empty. Container is not a pressure vessel.

Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws.

**Information on fire and explosion protection**

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

**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 container tightly closed.

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.

**7.3 Specific end use(s)**

**Recommendations** : Not available.

**Date of issue** : 09.01.2017

5/16

**Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - United Kingdom (UK)**

**Balloxy HB Light Comp B**

**SECTION 7: Handling and storage**

**Industrial sector specific solutions** : Not available.

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

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).

**8.1 Control parameters**

Occupational exposure limits

Product/ingredient name	Exposure limit values
hydrocarbons, C9, aromatics, (<0.1% Benzene)	<b>EH40-WEL (United Kingdom (UK), 12/2011). Absorbed through skin.</b> TWA: 200 mg/m <sup>3</sup> 8 hours. Form: All forms TWA: 40 ppm 8 hours. Form: All forms

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Derived no effect levels

Product/ingredient name	Type	Exposure	Value	Population	Effects	
benzyl alcohol	DNEL	Short term Inhalation	450 mg/m <sup>3</sup>	Workers	Systemic	
	DNEL	Long term Inhalation	90 mg/m <sup>3</sup>	Workers	Systemic	
	DNEL	Short term Dermal	47 mg/kg bw/day	Workers	Systemic	
	DNEL	Long term Dermal	9,5 mg/kg bw/day	Workers	Systemic	
	DNEL	Short term Dermal	28,5 mg/kg bw/day	Consumers	Systemic	
	DNEL	Short term Oral	25 mg/kg bw/day	Consumers	Systemic	
	DNEL	Long term Dermal	5,7 mg/kg bw/day	Consumers	Systemic	
	DNEL	Long term Oral	5 mg/kg bw/day	Consumers	Systemic	
	DNEL	Long term Inhalation	8,11 mg/m <sup>3</sup>	Consumers	Systemic	
	DNEL	Short term Inhalation	40,55 mg/m <sup>3</sup>	Consumers	Systemic	
	DNEL	Long term Oral	0,526 mg/kg bw/day	Consumers	Systemic	
	3-aminomethyl-3,5,5-trimethylcyclohexylamine 2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine hydrocarbons, C9, aromatics, (<0.1% Benzene)	DNEL	Long term Oral	0,05 mg/kg bw/day	Consumers	Systemic
		DNEL	Long term Dermal	25 mg/kg bw/day	Workers	Systemic
		DNEL	Long term Inhalation	150 mg/m <sup>3</sup>	Workers	Systemic
DNEL		Long term Dermal	11 mg/kg bw/day	Consumers	Systemic	
	DNEL	Long term Inhalation	32 mg/m <sup>3</sup>	Consumers	Systemic	

**Date of issue** : 09.01.2017

**Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - United Kingdom (UK)**

**Balloxy HB Light Comp B**

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

Hydrocarbons, C9-unsaturated, polymerized	DNEL	Long term Oral	11 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Dermal	16,4 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	57 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	8 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Inhalation	28 mg/m <sup>3</sup>	Consumers	Systemic
	DNEL	Long term Oral	4 mg/kg bw/day	Consumers	Systemic

**Predicted no effect concentrations**

Product/ingredient name	Type	Compartment Detail	Value	Method Detail
Benzyl alcohol	PNEC	Fresh water	1 mg/l	-
	PNEC	Marine	0,1 mg/l	-
	PNEC	Sewage Treatment Plant	39 mg/l	-
3-aminomethyl-3,5,5-trimethylcyclohexylamine	PNEC	Fresh water sediment	5,27 mg/kg dwt	-
	PNEC	Marine water sediment	0,527 mg/kg dwt	-
	PNEC	Soil	0,456 mg/kg dwt	-
	PNEC	Fresh water	0,06 mg/l	-
	PNEC	Marine	0,006 mg/l	-
	PNEC	Sewage Treatment Plant	3,18 mg/l	-
2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	PNEC	Fresh water sediment	5,784 mg/kg dwt	-
	PNEC	Marine water sediment	0,578 mg/kg dwt	-
	PNEC	Soil	1,121 mg/kg dwt	-
	PNEC	Fresh water	0,0295 mg/l	-
	PNEC	Marine	0,00295 mg/l	-
Hydrocarbons, C9-unsaturated, polymerized	PNEC	Sewage Treatment Plant	72 mg/l	-
	PNEC	Fresh water sediment	0,18 mg/kg dwt	-
	PNEC	Marine water sediment	0,018 mg/kg dwt	-
	PNEC	Soil	0,019 mg/kg dwt	-
	PNEC	Fresh water	54 µg/l	-
	PNEC	Marine	5,4 µg/l	-
	PNEC	Sewage Treatment Plant	2,2 mg/l	-
	PNEC	Fresh water sediment	1584 mg/kg dwt	-
	PNEC	Marine water sediment	158 mg/kg dwt	-
	PNEC	Marine water sediment	158 mg/kg dwt	-
PNEC	Soil	316,7 mg/kg dwt	-	
PNEC	Secondary Poisoning	200 mg/kg	-	

**8.2 Exposure controls**

**Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Individual protection measures**

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - United Kingdom (UK)**

**Balloxy HB Light Comp B**

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

- Eye/face protection** : Safety eyewear complying to EN 166 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: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
  
- 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. Wear suitable gloves tested to EN374. May be used, gloves(breakthrough time) 4 - 8 hours: PVC Recommended, gloves(breakthrough time) > 8 hours: fluor rubber, Viton®, 4H, butyl rubber, nitrile rubber  
  
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** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- 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** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**SECTION 9: Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

**Appearance**

- Physical state** : Liquid.
- Colour** : Various colours.
- Odour** : Characteristic.
- Odour threshold** : Not available.
- pH** : Not applicable.
- Melting point/freezing point** : Not applicable.
- Initial boiling point and boiling range** : Lowest known value: 205.3°C (401.5°F) (benzyl alcohol). Weighted average: 229.17°C (444.5°F)
- Flash point** : Closed cup: Not applicable.
- Evaporation rate** : 0.007 (benzyl alcohol) compared with butyl acetate

**Date of issue** : 09.01.2017 **8/16**



**Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - United Kingdom (UK)****Balloxy HB Light Comp B****SECTION 9: Physical and chemical properties**

<b>Flammability (solid, gas)</b>	: Not applicable.
<b>Burning time</b>	: Not applicable.
<b>Burning rate</b>	: Not applicable.
<b>Upper/lower flammability or explosive limits</b>	: 1.2 - 13%
<b>Vapour pressure</b>	: Highest known value: 0.02 kPa (0.2 mm Hg) (at 20°C) (benzyl alcohol). Weighted average: 0.01 kPa (0.08 mm Hg) (at 20°C)
<b>Vapour density</b>	: Highest known value: 3.7 (Air = 1) (benzyl alcohol).
<b>Relative density</b>	: 1.025 to 1.14 g/cm <sup>3</sup>
<b>Solubility(ies)</b>	: Insoluble in the following materials: cold water and hot water.
<b>Partition coefficient: n-octanol/ water</b>	: Not available.
<b>Auto-ignition temperature</b>	: Lowest known value: 280 to 470°C (536 to 878°F) (hydrocarbons, C9, aromatics, (<0.1% benzene)).
<b>Decomposition temperature</b>	: Not available.
<b>Viscosity</b>	: Kinematic (40°C): >0,205 cm <sup>2</sup> /s (>20,5 mm <sup>2</sup> /s)
<b>Explosive properties</b>	: Not available.
<b>Oxidising properties</b>	: Not available.

**9.2 Other information**

No additional information.

**SECTION 10: Stability and reactivity**

<b>10.1 Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>10.2 Chemical stability</b>	: The product is stable.
<b>10.3 Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>10.4 Conditions to avoid</b>	: No specific data.
<b>10.5 Incompatible materials</b>	: Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.
<b>10.6 Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**SECTION 11: Toxicological information****11.1 Information on toxicological effects**

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains 3-aminomethyl-3,5,5-trimethylcyclohexylamine, 2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine, Hydrocarbons, C9-unsaturated, polymerized. May produce an allergic reaction.

**Date of issue** : 09.01.2017**9/16**

**Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - United Kingdom (UK)**

**Balloxy HB Light Comp B**

**SECTION 11: Toxicological information**

Product/ingredient name	Result	Species	Dose	Exposure
benzyl alcohol 3-aminomethyl-3,5, 5-trimethylcyclohexylamine	LD50 Oral	Rat	1230 mg/kg	-
	LD50 Oral	Rat	1030 mg/kg	-

**Acute toxicity estimates**

Route	ATE value
<input checked="" type="checkbox"/> Oral Dermal Inhalation (vapours)	2819,8 mg/kg 10490,2 mg/kg 60,44 mg/l

**Specific target organ toxicity (single exposure)**

Product/ingredient name	Category	Route of exposure	Target organs
hydrocarbons, C9, aromatics, (<0.1% Benzene)	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects

**Specific target organ toxicity (repeated exposure)**

Not available.

**Aspiration hazard**

Product/ingredient name	Result
hydrocarbons, C9, aromatics, (<0.1% Benzene)	ASPIRATION HAZARD - Category 1

**Potential acute health effects**

- Eye contact** : Causes serious eye damage.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes severe burns. May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

**Symptoms related to the physical, chemical and toxicological characteristics**

- Eye contact** : Adverse symptoms may include the following:  
pain  
watering  
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur
- Ingestion** : Adverse symptoms may include the following:  
stomach pains

**Potential chronic health effects**

- General** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

**Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - United Kingdom (UK)**

**Balloxy HB Light Comp B**

**SECTION 12: Ecological information**

**12.1 Toxicity**

Product/ingredient name	Result	Species	Exposure
3-aminomethyl-3,5,5-trimethylcyclohexylamine  2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine  hydrocarbons, C9, aromatics, (<0.1% Benzene)	Acute EC50 17,4 to 21,5 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute IC50 37 mg/l	Algae	72 hours
	Acute EC50 29,5 mg/l	Algae - Scenedesmus subspicatus	72 hours
	Acute EC50 31,5 mg/l	Daphnia - Daphnia magna	24 hours
	Acute LC50 150 mg/l	Fish - Leuciscus idus melanotus	48 hours
	Acute EC50 <10 mg/l	Daphnia	48 hours
	Acute IC50 <10 mg/l	Algae	72 hours
	Acute LC50 <10 mg/l	Fish	96 hours

**Conclusion/Summary** : This material is harmful to aquatic life with long lasting effects.

**12.2 Persistence and degradability**

**Conclusion/Summary** : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Benzyl alcohol	-	-	Readily
3-aminomethyl-3,5,5-trimethylcyclohexylamine	-	-	Not readily
2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	-	-	Not readily
hydrocarbons, C9, aromatics, (<0.1% Benzene)	-	-	Not readily

**12.3 Bioaccumulative potential**

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Benzyl alcohol	0,87	<100	low
3-aminomethyl-3,5,5-trimethylcyclohexylamine	0,99	-	low
2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	-0,3	-	low
hydrocarbons, C9, aromatics, (<0.1% Benzene)	-	10 to 2500	high
Hydrocarbons, C9-unsaturated, polymerized	3,627	-	low

**12.4 Mobility in soil**

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Mobility** : Not available.

**12.5 Results of PBT and vPvB assessment**

**PBT** : Not applicable.

**vPvB** : Not applicable.

**12.6 Other adverse effects** : No known significant effects or critical hazards.

**Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - United Kingdom (UK)****Balloxy HB Light Comp B****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**

Do not allow to enter drains or watercourses. Material and/or container must be disposed of as hazardous waste.

**European waste catalogue (EWC)** : 08 01 11\* Waste paint and varnish containing organic solvents or other dangerous substances

**SECTION 14: Transport information**

**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.

Transport in accordance with ADR/RID, IMDG/IMO and ICAO/IATA and national regulation.

**International transport regulations**

**14.1 UN number** : 2735

**14.2 UN proper shipping name** : Polyamines, liquid, corrosive, n.o.s. (3-aminomethyl-3,5,5-trimethylcyclohexylamine)

**14.3 Transport hazard class(es)** : 8



**14.4 Packing group** : III

**14.5 Environmental hazards** : No.

**14.6 Special precautions for user** : **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.

**Additional information**

**ADR / RID** : Tunnel restriction code: (E)  
Hazard identification number: 80

**IMDG** : **Emergency schedules (EmS)**  
F-A, S-B

**14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** : Not available.

**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**

**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**

**Europe inventory** : Not determined.

**Black List Chemicals** : Not listed

**Priority List Chemicals** : Not determined

**Date of issue** : 09.01.2017

**12/16**

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - United Kingdom (UK)

**Balloxy HB Light Comp B**

**SECTION 15: Regulatory information**

**Industrial emissions (integrated pollution prevention and control) - Air** : Not listed

**Industrial emissions (integrated pollution prevention and control) - Water** : Not listed

**Chemical Weapons Convention List Schedule I Chemicals** : Not listed

**Chemical Weapons Convention List Schedule II Chemicals** : Not listed

**Chemical Weapons Convention List Schedule III Chemicals** : Not listed

**15.2 Chemical safety assessment** : Not applicable.

**SECTION 16: Other information**

Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** : ATE = Acute Toxicity Estimate  
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]  
 DNEL = Derived No Effect Level  
 EUH statement = CLP-specific Hazard statement  
 PNEC = Predicted No Effect Concentration  
 RRN = REACH Registration Number

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

Classification	Justification
Skin Corr. 1A, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412	Calculation method Calculation method Calculation method Calculation method

**Full text of abbreviated H statements** : H226 Flammable liquid and vapour.  
 H302 Harmful if swallowed.  
 H304 May be fatal if swallowed and enters airways.  
 H312 Harmful in contact with skin.  
 H314 Causes severe skin burns and eye damage.  
 H317 May cause an allergic skin reaction.  
 H318 Causes serious eye damage.  
 H332 Harmful if inhaled.  
 H335 May cause respiratory irritation.  
 H336 May cause drowsiness or dizziness.  
 H411 Toxic to aquatic life with long lasting effects.  
 H412 Harmful to aquatic life with long lasting effects.

**Full text of classifications [CLP/GHS]** : Acute Tox. 4, H302 ACUTE TOXICITY (oral) - Category 4  
 Acute Tox. 4, H312 ACUTE TOXICITY (dermal) - Category 4  
 Acute Tox. 4, H332 ACUTE TOXICITY (inhalation) - Category 4  
 Aquatic Chronic 2, H411 LONG-TERM AQUATIC HAZARD - Category 2  
 Aquatic Chronic 3, H412 LONG-TERM AQUATIC HAZARD - Category 3  
 Asp. Tox. 1, H304 ASPIRATION HAZARD - Category 1  
 Eye Dam. 1, H318 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1  
 Flam. Liq. 3, H226 FLAMMABLE LIQUIDS - Category 3  
 Skin Corr. 1A, H314 SKIN CORROSION/IRRITATION - Category 1A  
 Skin Corr. 1B, H314 SKIN CORROSION/IRRITATION - Category 1B  
 Skin Sens. 1, H317 SKIN SENSITIZATION - Category 1

**Date of issue** : 09.01.2017

**Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - United Kingdom (UK)****Balloxy HB Light Comp B****SECTION 16: Other information**

STOT SE 3, H335	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
STOT SE 3, H336	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

**Date of printing** : 09.01.2017**Date of issue/ Date of revision** : 09.01.2017**Date of previous issue** : 16.12.2016**Version** : 5**Notice to reader**

The information in this document is given to the best of Jotun's knowledge, based on laboratory testing and practical experience. Jotun's products are considered as semi-finished goods and as such, products are often used under conditions beyond Jotun's control. Jotun cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with local requirements. Jotun reserves the right to change the given data without further notice.

Users should always consult Jotun for specific guidance on the general suitability of this product for their needs and specific application practices.

If there is any inconsistency between different language issues of this document, the English (United Kingdom) version will prevail.



## Balloxy HB Light Comp B

### Exposure Scenario: Uses in Coatings - Industrial use

Sector of Use	: Industrial use
Process Category	: PROC05 PROC07 PROC08a PROC10
Environmental release category(ies)	: ERC4

Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including product transfer and preparation, application by brush, spray by hand or similar methods) and equipment cleaning.

### Operational conditions and risk management measures

#### Control of worker exposure

Frequency and duration of use	: Covers daily exposures up to 8 hours (unless stated differently)
General - Operational conditions	: Assumes use at not more than 20°C above ambient temperature, unless stated differently. Assumes a good basic standard of occupational hygiene is implemented
General - Risk management measures	: Wear chemical-resistant gloves (tested to EN374) in combination with specific activity training. Wear suitable coveralls to prevent exposure to the skin. Use suitable eye protection. See Section 8 for information on appropriate personal protective equipment.

#### Type of activity or process Risk management measures

Preparation of material for application	: Provide extract ventilation to points where emissions occur. Wear a respirator conforming to EN140 with type A/P2 filter or better.
Roller, spreader, flow application	: Provide extract ventilation to points where emissions occur. Wear a respirator conforming to EN140 with type A/P2 filter or better.
Spraying - Manual	: Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings. Wear a respirator conforming to EN140 with type A/P2 filter or better.

#### Control of environmental exposure

Organisational measures to prevent/limit release from site	: Prevent environmental discharge consistent with regulatory requirements.
Conditions and measures related to external treatment of waste for disposal	: External treatment and disposal of waste should comply with applicable local and/or national regulations. See Section 13 for additional waste treatment information.
Conditions and measures related to external recovery of waste	: External recovery and recycling of waste should comply with applicable local and/or national regulations.

#### Additional information

The exposure scenario for the mixture is based on the following substances:	
REACH #:	01-2119514687-32
REACH #:	01-2119456619-26 (from Comp A)



## Balloxy HB Light Comp B

### Exposure Scenario: Uses in Coatings - Professional use

Sector of Use	: Professional use
Process Category	: PROC05 PROC08a PROC10 PROC11
Environmental release category(ies)	: ERC8a ERC8d

Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including product transfer and preparation, application by brush, spray by hand or similar methods) and equipment cleaning.

### Operational conditions and risk management measures

#### Control of worker exposure

Frequency and duration of use	: Covers daily exposures up to 8 hours (unless stated differently)
General - Operational conditions	: Assumes use at not more than 20°C above ambient temperature, unless stated differently. Assumes a good basic standard of occupational hygiene is implemented
General - Risk management measures	: Wear chemical-resistant gloves (tested to EN374) in combination with specific activity training. Wear suitable coveralls to prevent exposure to the skin. Use suitable eye protection. See Section 8 for information on appropriate personal protective equipment.

#### Type of activity or process Risk management measures

Preparation of material for application - Indoor	: Provide extract ventilation to points where emissions occur. Avoid carrying out activities involving exposure for more than 1 hour and Wear a respirator conforming to EN140 with type A/P2 filter or better. or Provide extract ventilation to points where emissions occur. Avoid carrying out activities involving exposure for more than 4 hours and Wear a full-face respirator conforming to EN136 with Type A/P2 filter or better.
Preparation of material for application - Outdoor	: Ensure operation is undertaken outdoors. Avoid carrying out activities involving exposure for more than 1 hour and Wear a respirator conforming to EN140 with type A/P2 filter or better. or Ensure operation is undertaken outdoors. Avoid carrying out activities involving exposure for more than 4 hours and Wear a full-face respirator conforming to EN136 with Type A/P2 filter or better.
Equipment cleaning and maintenance	: Drain down system prior to equipment break-in or maintenance. Avoid carrying out activities involving exposure for more than 4 hours.
Roller, spreader, flow application - Indoor	: Provide extract ventilation to points where emissions occur. Wear a full-face respirator conforming to EN136 with Type A/P2 filter or better.
Roller, spreader, flow application - Outdoor	: Ensure operation is undertaken outdoors. Wear a full-face respirator conforming to EN136 with Type A/P2 filter or better.
Spraying - Manual - Indoor	: Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings. Wear a full-face respirator conforming to EN136 with Type A/P2 filter or better.
Spraying - Manual - Outdoor	: Ensure operation is undertaken outdoors. Wear a full-face respirator conforming to EN136 with Type A/P2 filter or better.

#### Control of environmental exposure

Organisational measures to prevent/limit release from site	: Prevent environmental discharge consistent with regulatory requirements.
Conditions and measures related to external treatment of waste for disposal	: External treatment and disposal of waste should comply with applicable local and/or national regulations. See Section 13 for additional waste treatment information.
Conditions and measures related to external recovery of waste	: External recovery and recycling of waste should comply with applicable local and/or national regulations.

#### Additional information

The exposure scenario for the mixture is based on the following substances:	
REACH #: 01-2119514687-32	
REACH #: 01-2119456619-26 (from Comp A)	