

MSDS MATERIAL SAFETY DATA SHEET		0.1 Product	Respi Boost
		0.2 Status	Active
		0.3 Version	1.1
		0.4 Version date	15-04-2022
1. Identification of the product and of the company			
1.1	<u>Product identification</u>		
Product name		Respi Boost	
Trade name		Respi Boost	
Article code		RESP0100	
Chemical description		Mixture	
REACH registration number		-	
1.2	<u>Relevant identified uses of the substance or mixture and uses advised against</u>		
Identified use(s)		Animal care (respiratory care)	
1.3	<u>Details of the supplier of the safety data sheet</u>		
Company identification		Name	Holland Animal Care B.V.
Contact	Address		De Leemkoele 2
	Zip code		7468 DM
	Town		Enter
	Country		The Netherlands
	Telephone		+31-(0)548-545520
	E-mail		info@hollandanimalcare.nl
	Website		www.hollandanimalcare.nl
1.4	<u>Emergency telephone number</u>		
Emergency telephone number		The Netherlands : National Poisoning Information Center - Bilthoven TEL: +31(0)30/274.88.88 Belgium : Antipoison Center - Brussels TEL: +32(0)70/245.245 (Only for the purpose of informing medical personnel in cases of acute intoxications)	
2. Hazards identification			
2.1	<u>Classification of the substance or mixture</u>		
Classification according to Regulation (EC) no. 1272/2008: Flam. Liq. 2; Flammable liquid, category 2; H225 Eye Irrit. 2; Serious eye damage / eye irritation, category 2; H319			

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2.2		Label elements				
Labelling according to Regulation (EC) no. 1272/2008:						
Hazardous component(s)		Ethanol				
Hazard pictogram(s)						
Signal word		Danger				
Hazard statements		H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation.				
Precautionary measures		P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 Keep container tightly closed. P240 Ground and bond container and receiving equipment. P241 Use explosion-proof (electrical / ventilating / lighting) equipment. P242 Use non-sparking tools. P243 Take action to prevent static discharges. P280 Wear protective gloves / protective clothing / eye protection / face protection. P370+P378 In case of fire: use alcohol resistant foam to extinguish. P403+P235 Store in a well-ventilated place. Keep cool. P501 Dispose of contents safely as hazardous waste.				
2.3		Other hazards				
Results of PBT and vPvB assessment		This substance does not meet the criteria for classification as PBT or vPvB.				
Endocrine disrupting properties		No indication of hormone disrupting potential.				
3. Composition/information on ingredients						
3.2		Mixtures				
Name component(s)	weight %	CAS no.	EINECS no.	Index no.	Reach no.	Classification
Ethanol	>50 %	64-17-5	200-578-6	603-002-00-5	01-2119457610-43-0000	Flam. Liq. 2; H225 Eye Irrit. 2; H319
The full text of the (EU)H-statements can be found in section 16.						

4. First aid measures	
4.1	Description of first aid measures
General	In case of an accident or unwellness, call a doctor immediately (if possible, show the operating instructions or safety data sheet). Remove contaminated or soaked clothing immediately.
First aid measures in case of inhalation	Remove the affected person to fresh air. Place the affected person in a resting position and keep warm. If symptoms persist, consult a doctor.
First aid measures in case of skin contact	In case of contact with skin, wash off immediately with plenty of soap and water. Apply a greasy ointment. In case of skin irritation, consult a doctor.
First aid measures in case of eye contact	In case of contact with eyes, rinse immediately with plenty of water for 10 to 15 minutes. Consult a doctor if symptoms persist.
First aid measures in case of ingestion	Rinse out mouth immediately and drink plenty of water. Consult a doctor if symptoms persist.
Self-protection	No special measures are required.
4.2	Most important symptoms and effects, both acute and delayed
Symptoms	Drowsiness, dizziness, disorientation, unconsciousness, nausea
Dangers	Caution in case of vomiting: Danger of aspiration!
4.3	Indication of any immediate medical attention and special treatment needed
First aid measures in case of ingestion	No special measures are required.
Self-protection	No special measures are required.
5. Firefighting measures	
If safe to do so, remove undamaged containers from the danger zone. Use water spray to protect persons and to cool containers in the danger zone.	
5.1	Extinguishing media
Suitable extinguishing media	Water spray, carbon dioxide (CO ₂), alcohol-resistant foam, dry chemical.
Unsuitable extinguishing media	Full water jet.
5.2	Special hazards arising from the substance or mixture
Special exposure hazards	In the event of fire, the following can be produced: Carbon dioxide (CO ₂), carbon monoxide.
5.3	Advice for firefighters
Special protective equipment	In case of fire: Wear self-contained breathing apparatus.
Special procedures	Collect contaminated extinguishing water separately. Do not allow to enter drains or watercourses.

6. Accidental release measures			
6.1	<u>Personal precautions, protective equipment and emergency procedures</u>		
Personal precautions		Move people to safety. Remove all sources of ignition. Provide adequate ventilation. Use personal protective equipment. See protective measures in sections 7 and 8.	
6.2	<u>Environmental precautions</u>		
Environmental precautions		Do not allow to enter drains or water courses.	
6.3	<u>Methods and material for containment and cleaning up</u>		
Methods for cleaning up		Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders). Treat the absorbed material according to the section Disposal. Avoid dust formation. Clean contaminated surfaces thoroughly. Wash off with plenty of water.	
6.4	<u>Reference to other sections</u>		
Personal protection		See section 8.	
Removal of the waste product		See section 13.	
7. Handling and storage			
7.1	<u>Precautions for safe handling</u>		
Handling		Keep away from sources of ignition. Do not smoke. Take measures against electrostatic charges. Do not breathe gas/fume/vapour/aerosol. Provide adequate ventilation and spot extraction at critical points.	
7.2	<u>Conditions for safe storage, including any incompatibilities</u>		
Storage		Ensure sufficient ventilation of the storage room. Keep away from sources of ignition. Do not smoke. Take measures against electrostatic charges. Protect against heat. Keep container tightly closed and in a well-ventilated place. Do not store together with: Oxidising agents.	
Protection against fire and explosion		Take measures against electrostatic charges. Vapours may form an explosive mixture with air.	
Packaging material		Keep/store only in the original container. Keep container tightly closed.	
7.3	<u>Specific end use(s)</u>		
Animal care			
8. Exposure controls/personal protection			
8.1	<u>Control parameters</u>		
Occupational exposure limits		<i>Ethanol (CAS-no. 64-17-5):</i>	
		Occupational exposure limit (long term exposure, 8h, inhalation):	260 mg/m ³
		Occupational exposure limit (short term exposure, 15 min, inhalation):	1 900 mg/m ³

DNELs		Ethanol (CAS-no. 64-17-5):	
		DNEL (long-term exposure, inhalation, systemic effects):	950 mg/m ³
8.2	<u>Exposure controls</u>		
Engineering measures		Provide adequate ventilation and spot extraction at critical points. Technical measures and the use of appropriate work procedures take precedence over the use of personal protective equipment. Do not eat, drink, smoke or sniff at the workplace. Wash hands before breaks and at the end of work. Use skin care products after work. Wash soiled clothing before reuse.	
Personal protection equipment			
Eye / face protection		Tight-fitting safety goggles.	
Skin protection		Suitable body protection: Overall. Body protection (in addition to normal work clothing) is required to protect against direct skin contact. Only wear suitable, comfortably fitting and clean protective clothing.	
Hand protection		Tested protective gloves are to be worn according to EN 374. Suitable material: butyl rubber, fluorocarbon rubber.	
Respiratory protection		Respiratory protection is required in case of aerosol formation. Gas filter device according to EN 141.	
Environmental exposure controls		Do not allow to enter drains or water courses.	
9. Physical and chemical properties			
9.1	<u>Information on basic physical and chemical properties</u>		
Physical state		Fluid	
Colour		Greenish	
Odour		Characteristic to alcohol.	
Melting / freezing point		No data available.	
Boiling point / range (1013 hPa)		No data available.	
Flammability		Flammable.	
Explosion hazard		Vapours can form an explosive mixture with air.	
Explosion limits		Lower explosion limit: 3.1 vol.% (literature value ethanol) Upper explosion limit: 27.7 vol.% (literature value ethanol)	
Flash point		23,8°C	
Auto-ignition temperature		No data available.	
Decomposition temperature		No data available.	
pH		No data available.	
Viscosity		No data available.	
Solubility		Fully miscible in water.	
Partition coefficient n-octanol/water		No data available.	

Vapour pressure	No data available.
Density or relative density	No data available.
Relative vapour density	No data available.
Solvent separation test	No data available.
Solvent content	No data available.
9.2	<u>Other information</u>
Other information	None.
10. Stability and reactivity	
10.1	<u>Reactivity</u>
Reactivity	Vapours can form an explosive mixture with air.
10.2	<u>Chemical stability</u>
Stability	When stored and handled properly, the product is stable.
10.3	<u>Possibility of hazardous reactions</u>
Hazardous reactions	Violent reactions with: Oxidising agent.
10.4	<u>Conditions to avoid</u>
Conditions to avoid	Heat. Keep away from sources of ignition. Do not smoke.
10.5	<u>Incompatible materials</u>
Materials to avoid	Oxidising agent.
10.6	<u>Hazardous decomposition products</u>
Hazardous decomposition products	In the event of fire, the following can be produced: Carbon dioxide (CO ₂), carbon monoxide.
11. Toxicological information	
11.1	<u>Information on hazard classes as defined in Regulation (EC) No. 1272/2008</u>
Acute toxicity	<i>Ethanol (CAS-no. 64-17-5):</i>
	LD ₅₀ (Oral, rat - male and female): 10 470 mg/kg (OECD test guideline 401)
	LC ₅₀ (Inhalation, rat - male and female, 4h): 124.7 mg/l (OECD test guideline 403)
Skin corrosion / irritation	<i>Ethanol (CAS-no. 64-17-5):</i>
	Rabbit result (24h): No skin irritation (OECD test guideline 404)
Serious eye damage / irritation	<i>Ethanol (CAS-no. 64-17-5):</i>
	Rabbit result: Causes severe eye irritation (OECD test guideline 405)
Aspiration hazard	<i>Ethanol (CAS-no. 64-17-5):</i>
	Aspiration hazard: No data available.

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Respiratory or skin sensitisation	<i>Ethanol (CAS-no. 64-17-5):</i>	
	Guinea pig result:	Negative (OECD test guideline 406). Remarks: The value is given by analogy with the following substances: Methanol
Carcinogenicity	<i>Ethanol (CAS-no. 64-17-5):</i>	
	Carcinogenicity: IARC 1:	No data available. Group 1: carcinogenic to humans (ethanol)
Mutagenicity	<i>Ethanol (CAS-no. 64-17-5):</i>	
	Ames Test Result: Salmonella typhimurium: In vitro gene mutation test on mammalian lymphoma cells from mice: Mouse - male Result:	Negative Negative (OECD test guideline 478). Positive results were obtained in some in vivo tests.
Reproductive toxicity	<i>Ethanol (CAS-no. 64-17-5):</i>	
	Reproductive toxicity:	No data available.
Specific target organ toxicity – single exposure	<i>Ethanol (CAS-no. 64-17-5):</i>	
	Specific target organ toxicity at single exposure:	No data available.
Specific target organ toxicity – repeated exposure	<i>Ethanol (CAS-no. 64-17-5):</i>	
	Specific target organ toxicity in case of repeated exposure:	No data available.
11.2 Information on other hazards		
Other hazards	Repeated dose toxicity (rat - male - oral - dose at which no adverse health effects were observed): Lowest dose at which adverse health effects are observed: Irritant effects, respiratory paralysis, dizziness, narcosis, intoxication, euphoria, nausea, vomiting:	1 730 mg/kg 3 200 mg/kg To our knowledge, the chemical, physical and toxicological properties have not been extensively studied.
12. Ecological information		
12.1 Toxicity		
Ecotoxicity	<i>Ethanol (CAS-no. 64-17-5):</i>	
	Acute fish toxicity (96h): Acute daphnia toxicity (water flea, Daphnia magna, 48h): Acute daphnia toxicity (water flea, Daphnia magna, 48h):	LC ₅₀ : 11 000 mg/l LC ₅₀ : 9 280 mg/l EC ₅₀ : 9 950 mg/l

12.2	<u>Persistence and degradability</u>		
Persistence and degradability		Biodegradability: Biochemical oxygen demand (BOD): Theoretical oxygen demand:	Approx. 95%. Readily biodegradable. 1 670 mg/g (Lit.) 2 100 mg/g (Lit.)
12.3	<u>Bioaccumulation</u>		
Bioaccumulation		No indication of bioaccumulative potential.	
12.4	<u>Mobility in soil</u>		
Mobility		None.	
12.5	<u>Results of PBT and vPvB assesment</u>		
Evaluation		This substance does not meet the criteria for classification as PBT or vPvB.	
12.5	<u>Endocrine disrupting properties</u>		
Endocrine disrupting potential		No indication of hormone disrupting potential.	
12.6	<u>Other adverse effects</u>		
Other adverse effects		None	
13. Disposal considerations			
13.1	<u>Waste treatment methods</u>		
Waste from residues / unused products		Dispose of product residues in accordance with national and regional regulations. Leave chemicals in original containers. Do not mix with other waste. Observe waste directive 2008/98/EC.	
Removal of contaminated packaging		Containers that have not been cleaned must be treated in accordance with the product. Observe waste directive 2008/98/EC.	
14. Transport information			
Land transport (ADR/RID):		<u>14.1 UN-number:</u> <u>14.2 UN proper shipping name:</u> <u>14.3 Transport hazard class(es):</u> <u>14.4 Packing group:</u>	UN 1993 Flammable liquid, n.o.s (ethanol) 3 III Danger label:  Classification code: F1 Special provisions: 274, 601 Limited quantity (LQ): 5 L Excepted quantity (EQ): E1 Transport category: 3 Tunnel code: D/E

Marine transport (IMDG):	14.1 UN-number: 14.2 UN proper shipping name: 14.3 Transport hazard class(es): 14.4 Packing group:	UN 1993 Flammable liquid, n.o.s (ethanol) 3 III Danger label:  Special provisions: 223, 274, 955 EmS-no.: F-E, S-E MFAG: - Marine pollutant: No. Special instructions: Substances to avoid: oxidising agents Limited quantity (LQ): 5 L Excepted quantity (EQ): E1
Air transport (IATA):	14.1 UN-number: 14.2 UN proper shipping name: 14.3 Transport hazard class(es): 14.4 Packing group:	UN 1993 Flammable liquid, n.o.s (ethanol) 3 III Danger label: 
14.5	<u>Environmental hazards</u>	
Environmentally hazard	No	
14.6	<u>Special precautions for user</u>	
Special precautions	No further relevant information available.	
14.7	<u>Maritime transport in bulk according to IMO instruments</u>	
Maritime transport in bulk	Not applicable.	
15.	Regulatory information	
15.1	<u>Safety, health and environmental regulations/legislation specific for the substance or mixture</u>	
Relevant EU rule(s)	<i>Directive 1999/13/EC on the limitation of emissions of volatile organic compounds (VOC Directive):</i> Volatile organic compound (VOC) content by weight: >50. <i>Regulation (EC) No 2037/2000 on substances that deplete the ozone layer:</i> None. <i>Regulation (EC) No 850/2004 on persistent organic pollutants:</i> None. <i>Regulation (EC) No 689/2008 concerning the export and import of dangerous chemicals:</i>	

	None. <i>Regulation (EC) No 648/2004 on detergents (Detergents Regulation):</i> None. <i>Restrictions under Title VIII of Regulation (EC) No 1907/2006:</i> None.
National regulations	Germany: National legislation must be observed in addition. <i>Guidance on employment restrictions:</i> None. <i>Hazardous Incident Ordinance:</i> Quantity threshold: 5 <i>Storage class according to VCI:</i> 3 <i>Water hazard class according to VwVwS:</i> 1 slightly hazardous to water (WGK 1)
15.2	<u>Chemical Safety Assessment</u>
A chemical safety assessment for substances in this mixture have not been carried out.	
16. Other information	
Indication of changes (revised safety data sheet)	Alignment to regulation. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU. Restructuring and revising sections 1 to 15.
Sources of used key data	This information is based on the currently available information (Producer(s)). See also the website: https://echa.europa.eu/information-on-chemicals/registered-substances
(EU)H-statement(s)	H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation.
Classification procedure	The summation method was used to calculate the classification of the mixture.
List of abbreviations and acronyms	ADN (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieur): European convention on the international carriage of dangerous goods by inland waterways. ADR (Accord européen relatif au transport international des marchandises dangereuses par route): European convention on the international carriage of dangerous goods by road. CAS: Chemical Abstracts Service. CLP: Classification, Labelling and Packaging (Regulation (EU) no. 1272/2008). EC₅₀: median effective concentration. EINECS: European Inventory of Existing Commercial Chemical Substances. EN: European standard. Eye Irrit.: Serious eye irritation. Flam. Liq.: Flammable liquid. GHS: Globally Harmonized System of Classification and Labelling of Chemicals. IATA: International Air Transport Association. IMDG: International Maritime Dangerous Goods code. IMO: International Maritime Organisation. LC₅₀: the concentration of a substance that causes death in 50% of a population. LD₅₀: the amount of a substance that causes death in 50% of a population. PBT: persistent, bioaccumulative and toxic. PNEC: predicted no effect concentration. REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals (Regulation (EU) no. 1907/2006). RID: Regulations concerning the International carriage of Dangerous goods by rail. vPvB: very persistent and very bioaccumulative.

This information is to our knowledge correct and complete on the date of issue of this safety data sheet. The information only concerns the product and does not give any guarantee for the quality and the completeness of the properties of the

product, or in case of mixing or using in any other process. It remains the responsibility of the user to assure himself that the information is suitable and complete concerning the special use he makes of the product.
Holland Animal Care B.V. denies all responsibility for loss or damage resulting from the use of these data.

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