

Riedel-de Haën™

Ethyl acetate

31063-2.5L

Version 1.5

Issuing date

Revision Date 11/27/2017

Print Date 06/28/2019

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product information

Trade name	:	Ethyl acetate
Number	:	00000020226
Recommended use of the chemical and restrictions on use		Laboratory chemicals
Manufacturer or supplier's details	:	Honeywell Specialty Chemicals Seelze GmbH Wunstorfer Straße 40 Seelze, 30926
For further information, please contact:	:	1-800-368-0050 +1-231-726-3171 (Monday-Friday, 9:00am-5:00pm)
In case of emergency call	:	Medical: 1-800-498-5701 or +1-303-389-1414 Transportation (CHEMTREC): 1-800-424-9300 or +1-703- 527-3887 In Japan: +(81)-345209637 (24 hours/day, 7 days/week)

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification of the	: Flammable liquids, Category 2
substance or mixture	Eye irritation, Category 2A
	Specific target organ toxicity - single exposure, Category 3

GHS Label elements, including precautionary statements

: Danger

Symbol(s)

-	
	بلار



Hazard statements

: Highly flammable liquid and vapour. Causes serious eye irritation. May cause drowsiness and dizziness.



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Version 1.5 Precautionary		Prevention: Keep away from hea smoking. Keep container tight Ground/bond contain Use explosion-proof Use only non-sparki Take precautionary Avoid breathing dus Wash skin thorough Use only outdoors o Wear protective glow protection. Response: IF ON SKIN (or hair) contaminated clothir IF INHALED: Remov position comfortable IF IN EYES: Rinse of Remove contact len rinsing. Call a POISON CEN If eye irritation persis In case of fire: Use of foam for extinction.	at/sparks/open flam ly closed. ner and receiving e electrical/ ventilati measures against a t/ fume/ gas/ mist/ ly after handling. r in a well-ventilate /es/ protective cloth): Remove/ Take of ng. Rinse skin with ve victim to fresh a e for breathing. cautiously with wate ses, if present and ITER/doctor if you sts: Get medical ac dry sand, dry chem	nes/hot surfaces. No equipment. ng/ lighting/ equipment. static discharge. vapours/ spray. ed area. hing/ eye protection/ face if immediately all water/ shower. ir and keep at rest in a er for several minutes. easy to do. Continue feel unwell. lvice/ attention. ical or alcohol-resistant
		Keep cool. Store locked up. Disposal:		container tightly closed. oproved waste disposal
3. COMPOSITION/	INFORMATION ON	INGREDIENTS		
Formula	:	C4H8O2		
Chemical natu	re :	Substance		
Chemical nam	e		CAS-No.	Concentration
Ethyl acetate Ethyl acetate			141-78-6	100.00 %
4. FIRST AID MEA	SURES			
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Inhalation	:	Remove to fresh air. If not breathing, give artificial respiration If breathing is difficult, give oxygen. Use oxygen as required, provided a qua present.	
Skin contact	:	Call a physician. Wash off immediately with plenty of wate minutes. Take off contaminated clothing and shoe Wash contaminated clothing before re-u Call a physician if irritation develops or p	es immediately. se.
Eye contact	:	Rinse immediately with plenty of water, a for at least 15 minutes. Call a physician.	also under the eyelids,
Ingestion	:	Do not induce vomiting without medical a Never give anything by mouth to an unce If victim is fully conscious, give a cupful Call a physician.	onscious person.
Notes to physician	:	Treat symptomatically.	
FIREFIGHTING MEASURES			
Suitable extinguishing media	:	Alcohol-resistant foam Dry chemical Carbon dioxide (CO2) Cool closed containers exposed to fire w	<i>i</i> ith water spray.
Specific hazards during firefighting	:	Flammable. Vapours may form explosive mixtures wi Vapours are heavier than air and may sp Vapors may travel to areas away from w igniting/flashing back to vapor source. In case of fire hazardous decomposition produced such as: Carbon monoxide Carbon dioxide (CO2)	oread along floors. ork site before
Special protective equipment for firefighters Further information		Wear self-contained breathing apparatus	
	:	Use extinguishing measures that are approximation circumstances and the surrounding envi	
ACCIDENTAL RELEASE MEA	SUR	3/12	



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Personal prec protective equ emergency pr	ipment and	lr K E D A	Vear personal protective equipment. nmediately evacuate personnel to safe (eep people away from and upwind of insure adequate ventilation. emove all sources of ignition. to not swallow. woid breathing vapours, mist or gas. woid contact with skin, eyes and clothi	spill/leak.
Environmenta	I precautions	P D D D	Prevent further leakage or spillage if sa Prevent product from entering drains. Discharge into the environment must be to not flush into surface water or sanita to not allow run-off from fire fighting to ourses.	e avoided. ary sewer system.
Methods and containment a	materials for and cleaning up	N U C m a	Yentilate the area. Io sparking tools should be used. Ise explosion-proof equipment. Contain spillage, soak up with non-com naterial, (e.g. sand, earth, diatomaceou nd transfer to a container for disposal ational regulations (see section 13).	us earth, vermiculite)
	D STORAGE			
ANDLING AN	D STORAGE			
Handling	D STORAGE	U K D A	Vear personal protective equipment. Ise only in well-ventilated areas. Teep container tightly closed. To not smoke. To not swallow. Twoid breathing vapours, mist or gas. Twoid contact with skin, eyes and clothi	ng.
Precautions fo	or safe handling tection against	UKDDAA KTEtrUKigN	lse only in well-ventilated areas. leep container tightly closed. to not smoke. to not swallow. void breathing vapours, mist or gas.	d surfaces. static discharges. unded before beginning
Handling Precautions fo Advice on pro	or safe handling tection against	UKDDAA KTEtrUKigN	Ise only in well-ventilated areas. Geep container tightly closed. To not smoke. To not swallow. Avoid breathing vapours, mist or gas. Avoid contact with skin, eyes and clothing Geep away from fire, sparks and heated take precautionary measures against so ansfer operations. The sexplosion-proof equipment. Geep product and empty container awa mition. To sparking tools should be used.	d surfaces. static discharges. unded before beginning



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incompatibilities		Keep containers tightly closed in a dry, or ventilated place. Containers which are opened must be c kept upright to prevent leakage. Keep away from heat and sources of igr Keep away from direct sunlight. Store away from incompatible substance Container hazardous when empty. Do not pressurize, cut, weld, braze, solo expose containers to heat or sources of	arefully resealed and hition. es. ler, drill, grind or

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS- No.	Value	Control parameters	Update	Basis
Ethyl acetate Ethyl acetate	141-78-6	TL : Threshold limits	(200 ppm)	08 2006	ISHL:Industrial Safety and Health Law OEL

TWA : Time	720 mg/m3	04 2007	Japan Society
weighted	(200 ppm)		for Occupational
average			Health:Japan
			Society for
			Occupational
			Health
			allowable
			concentration
			recommendatio
			n value

Appropriate engineering controls

Use with local exhaust ventilation.

Prevent vapour buildup by providing adequate ventilation during and after use.

Individual protection measures, such as personal protective equipment

Respiratory protection	 In case of insufficient ventilation, wear suitable respiratory equipment. For rescue and maintenance work in storage tanks use self- contained breathing apparatus. Use NIOSH approved respiratory protection.
Hand protection	: Solvent-resistant gloves Gloves must be inspected prior to use. 5/12



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	Re	place when worn.	
Eye protection	We Sat If s	not wear contact lenses. ear as appropriate: fety glasses with side-shields plashes are likely to occur, wear: ggles or face shield, giving complete	e protection to eyes
Skin and body protection	Sol Fla If s	ear as appropriate: lvent-resistant apron me retardant antistatic protective clo plashes are likely to occur, wear: otective suit	othing.
Hygiene measures	Wa pro Kee Rei Do Avo	nen using do not eat, drink or smoke. ash hands before breaks and immedi oduct. ep working clothes separately. move and wash contaminated clothir not swallow. oid breathing vapours, mist or gas. oid contact with skin, eyes and clothi	ately after handling the ng before re-use.
Protective measures	the Leç	sure that eyewash stations and safet workstation location. gal requirements are to be considere ection, use and care of personal pro	d in regard of the
PHYSICAL AND CHEMICAL	PROPER	TIES	
Physical state	: liqu	ıid	
i nyolodi olalo			
Colour	: col	ourless	
-	: col : like		
Colour	: like		
Colour Odour	: like : Not	e fruit	
Colour Odour pH	: like : Not : -84	e fruit te: no data available	
Colour Odour pH Melting point/range	: like : Not : -84 : 77 : 25	e fruit te: no data available 4 °C	
Colour Odour pH Melting point/range Boiling point/boiling range	: like : Not : -84 : 77 : 25	e fruit te: no data available 4 °C ⁷ °C at 1,013 hPa • °F (-4 °C) thod: closed cup	



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Lower explosion lir	nit :	2.1 %(V)	
Upper explosion lir	nit :	11.5 %(V)	
Vapour pressure	:	97 hPa at 20 °C(68 °F)	
Vapour density	:	ca. 3 Note: (Air = 1.0)	
Density	:	0.901 g/cm3	
Water solubility	:	ca. 90 g/l	
Solubility in other s	olvents :	Note: Soluble in most organic solvents	
Ignition temperatur	e :	426 °C	
Viscosity, kinemati	c :	Note: not determined	
Molecular weight	:	88.11 g/mol	
0. STABILITY AND R	EACTIVITY		
Chemical stability	:	Stable under normal conditions.	
Possibility of hazar	dous :	Hazardous polymerization does not occur	
reactions Conditions to avoid	1 :	Heat, flames and sparks. Keep away from direct sunlight.	
Incompatible mater avoid	rials to :	Strong oxidizing agents Acids Bases	
		Oxidizing solids Oxidizing liquids	



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Hazardous decom products	position :	In case of fire hazardous decomposition produced such as: Carbon monoxide Carbon dioxide (CO2)	n products may be
11. TOXICOLOGICAL	INFORMATIO	N	
Acute oral toxicity	:	LD50: 4,934 mg/kg Species: Rabbit Method: OECD Test Guideline 401	
	:	LD50: 10,200 mg/kg Species: Rat, female	
Acute inhalation to	oxicity :	LC0: > 22.5 mg/l > 6000 ppm Exposure time: 6 h Species: Rat Note: No deaths	
Acute dermal toxi	city :	LD50: > 18,000 mg/kg Species: Rabbit	
Skin irritation	:	Species: Rabbit Result: slight irritation Method: OECD Test Guideline 404	
Eye irritation	:	Species: Rabbit Result: slight irritation Method: OECD Test Guideline 405	
12. ECOLOGICAL INF	ORMATION		
Toxicity			
Toxicity to fish	:	LC50: 230 mg/l Exposure time: 96 h Species: Salmo gairdneri	
Toxicity to algae	:	EC50: 3,300 mg/l	
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		Exposure time: 48 h Species: scenedesmus subspicatus	
	:	Growth inhibition NOEC: > 100 mg/l Exposure time: 72 h Species: Algae	
Persistence and degradabil	ity		
Bioaccumulative potential			
Bioaccumulation	:	Note: Bioaccumulation is unlikely.	
Biochemical Oxygen Demand (BOD)	:	Value: 293 mg/g	
Chemical Oxygen Demand (COD)	:	Value: 1,816 mg/g	
13. DISPOSAL CONSIDERATIO	NS		
WDPCL Waste Disposal and Public Cleansing Law	:	Specially Controlled Industrial Waste	
Disposal methods	:	In accordance with local and national reg	gulations.
14. TRANSPORT INFORMATION	N		
ADR UN/ID No. Description of the goods Class Packing group Classification Code Hazard Identification Numbe Labels	:	UN 1173 ETHYL ACETATE 3 II F1 33 3	
IATA UN/ID No. Description of the goods Class Packing group Labels	:	UN 1173 Ethyl acetate 3 II 3 9/12	



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Packing instruction (c	argo : 364	1	
aircraft)	aiyo . 304	t	
Packing instruction	: 353	3	
(passenger aircraft) Packing instruction	: Y34	41	
(passenger aircraft)	. 10-	T I	
IMDG			
UN/ID No.			
Description of the goo Class	500S : ETI : 3	HYL ACETATE	
Packing group	:		
Labels	: 3		
EmS Number 1	: F-E		
EmS Number 2	: S-D	J	
Marine pollutant	: no		
REGULATORY INFO	RMATION		
National regulatory	information		
Vessel Safety Law	: Flam	mable liquids (Article 2 and 3 of rule	
JP VSL	stora	ge of dangerous goods and its Atta	ahad Table 1)
31 VOL	51014	ige of daligerous goods and its Alla	ched Table T)
		ge of dangerous goods and its Attai	
Aviation Law	: Flam	mable liquid (Article 194 of The Enf	
	: Flam		
Aviation Law JP AVL	: Flam Aviat	mable liquid (Article 194 of The Enf	
Aviation Law	: Flam Aviat	mable liquid (Article 194 of The Enf	
Aviation Law JP AVL Substances Subject t	: Flam Aviat	mable liquid (Article 194 of The Enf tion Law and its Attached Table 1)	
Aviation Law JP AVL Substances Subject t Notified Names JP MSDSD Substances Subject t	: Flam Aviat o be : Thre: o be : Articl	amable liquid (Article 194 of The Enf tion Law and its Attached Table 1) shold Concentration: 1 % wt 177 le 18	
Aviation Law JP AVL Substances Subject t Notified Names JP MSDSD Substances Subject t Indicated Names	: Flam Aviat o be : Thre: o be : Articl	mable liquid (Article 194 of The Enf tion Law and its Attached Table 1) shold Concentration: 1 % wt 177	
Aviation Law JP AVL Substances Subject t Notified Names JP MSDSD Substances Subject t	: Flam Aviat o be : Thre: o be : Articl	amable liquid (Article 194 of The Enf tion Law and its Attached Table 1) shold Concentration: 1 % wt 177 le 18	
Aviation Law JP AVL Substances Subject t Notified Names JP MSDSD Substances Subject t Indicated Names	: Flam Aviat o be : Thre: o be : Articl	amable liquid (Article 194 of The Enf tion Law and its Attached Table 1) shold Concentration: 1 % wt 177 le 18	
Aviation Law JP AVL Substances Subject t Notified Names JP MSDSD Substances Subject t Indicated Names	: Flam Aviat to be : Thre: to be : Articl Thre: : Gro	amable liquid (Article 194 of The Enf tion Law and its Attached Table 1) shold Concentration: 1 % wt 177 le 18 shold limits: 1 % wt 9.9	
Aviation Law JP AVL Substances Subject t Notified Names JP MSDSD Substances Subject t Indicated Names JPISHL LR	: Flam Aviat to be : Thre: to be : Articl Thre: : Gro Typ	mable liquid (Article 194 of The Enf tion Law and its Attached Table 1) shold Concentration: 1 % wt 177 le 18 shold limits: 1 % wt 9.9 oup 4 Flammable liquids be 1 petroleums	
Aviation Law JP AVL Substances Subject t Notified Names JP MSDSD Substances Subject t Indicated Names JPISHL LR	: Flam Aviat to be : Thre to be : Articl Thre Thre Haz	amable liquid (Article 194 of The Enf tion Law and its Attached Table 1) shold Concentration: 1 % wt 177 le 18 shold limits: 1 % wt 9.9 oup 4 Flammable liquids be 1 petroleums zardous rank II	
Aviation Law JP AVL Substances Subject t Notified Names JP MSDSD Substances Subject t Indicated Names JPISHL LR	: Flam Aviat to be : Thre: to be : Articl Thre: : Gro Typ Haz Wa	mable liquid (Article 194 of The Enf tion Law and its Attached Table 1) shold Concentration: 1 % wt 177 le 18 shold limits: 1 % wt 9.9 oup 4 Flammable liquids be 1 petroleums	
Aviation Law JP AVL Substances Subject t Notified Names JP MSDSD Substances Subject t Indicated Names JPISHL LR	: Flam Aviat to be : Thre to be : Articl Thre : Gro Typ Haz Wa Kee	amable liquid (Article 194 of The Enf tion Law and its Attached Table 1) shold Concentration: 1 % wt 177 le 18 shold limits: 1 % wt 9.9 oup 4 Flammable liquids be 1 petroleums zardous rank II atter insoluble ep away from fire	orcement Rules of
Aviation Law JP AVL Substances Subject t Notified Names JP MSDSD Substances Subject t Indicated Names JPISHL LR Fire Service Law	: Flam Aviat o be : Thre: to be : Articl Thre: : Gro Typ Haz Wa Kee erious : Del _aw 30.	amable liquid (Article 194 of The Enf tion Law and its Attached Table 1) shold Concentration: 1 % wt 177 le 18 shold limits: 1 % wt 9.9 bup 4 Flammable liquids be 1 petroleums zardous rank II ater insoluble ep away from fire leterious substance not for pharmac 3	orcement Rules of
Aviation Law JP AVL Substances Subject t Notified Names JP MSDSD Substances Subject t Indicated Names JPISHL LR Fire Service Law	: Flam Aviat o be : Thre to be : Articl Thre : Gro Typ Haz Wa Kee erious : Del _aw 30. List	amable liquid (Article 194 of The Enf tion Law and its Attached Table 1) shold Concentration: 1 % wt 177 le 18 shold limits: 1 % wt 9.9 oup 4 Flammable liquids be 1 petroleums zardous rank II tter insoluble ep away from fire leterious substance not for pharmac 3 ted	orcement Rules of
Aviation Law JP AVL Substances Subject t Notified Names JP MSDSD Substances Subject t Indicated Names JPISHL LR Fire Service Law	: Flam Aviat o be : Thre to be : Articl Thre : Gro Typ Haz Wa Kee erious : Del _aw 30. List	amable liquid (Article 194 of The Enf tion Law and its Attached Table 1) shold Concentration: 1 % wt 177 le 18 shold limits: 1 % wt 9.9 bup 4 Flammable liquids be 1 petroleums zardous rank II ater insoluble ep away from fire leterious substance not for pharmac 3	orcement Rules of



Ethyl acetate 31063-2.5L Version 1.5 Issuing date Revision Date 11/27/2017 Print Date 06/28/2019 Other international regulations **Notification status** US. Toxic Substances : On TSCA Inventory Control Act Australia. Industrial Chemical : On the inventory, or in compliance with the inventory (Notification and Assessment) Act Canada. Canadian : All components of this product are on the Canadian DSL **Environmental Protection Act** (CEPA). Domestic Substances List (DSL) Japan. Kashin-Hou Law List : On the inventory, or in compliance with the inventory Korea. Existing Chemicals : On the inventory, or in compliance with the inventory Inventory (KECI) Philippines. The Toxic : On the inventory, or in compliance with the inventory Substances and Hazardous and Nuclear Waste Control Act China. Inventory of Existing : On the inventory, or in compliance with the inventory **Chemical Substances** New Zealand. Inventory of : On the inventory, or in compliance with the inventory Chemicals (NZIoC), as published by ERMA New Zealand **16. OTHER INFORMATION** HMIS III **NFPA** : 2* Health hazard 1 : 3 Flammability 3 Physical Hazard : 0 Instability 0 : * - Chronic health hazard Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.



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Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user. This information should not constitute a guarantee for any specific product properties.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group