GRACEMATE POPPY/JASMIN DIA CHEMICAL CO., LTD. Page1 of 15 Date of issue: 12<sup>th</sup> May, 2017

# SAFETY DATA SHEET

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

1.1. Product identifier			
Product name:	GRACEMATE POPPY/JASMIN		
1.2. Relevant identified uses of	the substance or mixture and uses advised against		
<b>Identified uses:</b>	Air freshener		
Uses advised against:	No information		
1.3. Details of the supplier of the	ne safety data sheet		
Name of supplier (impor	ter): TRUCK SHOP B.V.		
Department in Charge	Michel Zuurdeeg		
Address	De Corridor 12 E 3621 ZB Breukelen Netherlands		
<b>Telephone number</b>	+31-346-284848		
Fax number			
e-mail address	michel@truck-shop.nl		
Name of manufacturer in	n Japan: DIA CHEMICAL CO., LTD.		
Department in Charge			
Address	2-20-13, Midorigaoka, Toyonaka-shi, Osaka, 560-0002 Japan		
<b>Telephone number</b>	+81-6-6846-3735		
Fax number	+81-6-6846-3731		
e-mail address			
1.4. Emergency telephone num	ber		

+81-6-6846-3735

# **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

# Classification in accordance with EC No 1272/2008:

Flam. Liq. 2: H225 Eye Irrit. 2: H319 STOT SE 3: H335 STOT SE 3: H336 Carc. 1: H350 Repr. 1: H360 Lact. : H362 STOT SE 2: H371 STOT RE 1: H372 STOT RE 2: H373

2.2. Label elements In accordance with EC No 1272/2008: Pictogram



Signal word	Danger	
Hazard Statements	H225: Highly flammable liquid and vapour	
	H319: Causes serious eye irritation	
	H335: May cause respiratory irritation	
	H336: May cause drowsiness or dizziness	
	H350: May cause cancer	
	H360: May damage fertility or the unborn child	
	H362: May cause harm to breast-fed children	
	H371: May cause damage to organs	
	H372: Causes damage to organs through prolonged or	
	repeated exposure	
	H373: May cause damage to organs through prolonged	
	repeated exposure	
<b>Precautionary Statements</b>		
[Prevention]	P201: Obtain special instructions before use.	
	P210: Keep away from heat, hot surfaces, sparks, open flames	
	and other ignition sources. No smoking.	
	P260: Do not breathe dust/fume/gas/mist/vapours/spray.	
	P263: Avoid contact during pregnancy/while nursing.	
	P280: Wear protective gloves/protective clothing/eye	
	protection/face protection.	
[Emergency response]	P308+P313: IF exposed or concerned: Get medical advice/attention.	

# 2.3. Other hazards

The product does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

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

# 3.1. Substances

Not applicable

#### 3.2. Mixtures

# GRACEMATE POPPY/JASMIN

# Product Name: Information on ingredients:

Chemical	CAS No.	EC No.	Index	REACH	Concentrat	Classification**	Specific
name			No.	Registrat	ion (wt %)		Concentration limits
name				ion No.*			
Ethanol	64-17-5	200-578-	603-002-	-	44.5	Flam. Liq. 2:	-
		6	00-5			H225	
						Eye Irrit. 2:	
						H319	
						STOT SE 3:	
						H335	
						STOT SE 3:	

GRACEMATE POPPY/JASMIN DIA CHEMICAL CO., LTD. Page3 of 15 Date of issue: 12<sup>th</sup> May, 2017

Isopentyl acctate     123-92-2     204-662- 3     607-130- 00-2     -     0.5 - 1     Film (137) (137) (137)     Film (137) (137)       Isopentyl acctate     123-92-2     204-662- 3     607-130- 00-2     -     0.5 - 1     Film (137)     Film (137)     -       Benzyl acctate     140-11-4     205-399- 7     -     -     2.21     Skin Irrit. 2: H315     -       Benzyl acctate     140-11-4     205-399- 7     -     -     2.21     Skin Irrit. 2: H315     -       Benzyl acctate     100-51-6     202-859- 9     -     -     2.21     Skin Irrit. 2: H315     -       H372 STOT RE 1: H373     -     -     2.21     Skin Irrit. 2: H316     -       Benzyl alcohol     100-51-6     202-859- 9     603-057 00-5     -     0.1 - 0.5     Acute Tox. 4: H312     -       Benzyl acctate     123-86-4     204-658- 00-5     607-025- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H319     -       Butyl acctate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H319							11226	
Benzyl acetate     140-11-4     205-399- 7     -     -     0.1 - 0.5     1     Filter     H372 H373     -       Benzyl acetate     140-11-4     205-399- 7     -     -     2.21     Skin Irrit. 2: H375 STOT RE 1: H376     -     -     2.21     Skin Irrit. 2: H375 STOT SE 3: H375 STOT SE 3: H375     -								
Repr. 1: H360     Repr. 1: H360       Isopentyl acctate     123-92-2     204-662- 3     607-130- 00-2     -     0.5 - 1     Flam. Liq. 3: H373       Isopentyl acctate     123-92-2     204-662- 3     607-130- 00-2     -     0.5 - 1     Flam. Liq. 3: H226     -       Benzyl acctate     140-11-4     205-399- 7     -     -     2.21     Skin Irrit. 2: H315     -       Benzyl acctate     140-11-4     205-399- 7     -     -     2.21     Skin Irrit. 2: H315     -       Benzyl acctate     140-11-4     205-399- 7     -     -     2.21     Skin Irrit. 2: H315     -       Benzyl acctate     140-11-4     205-399- 7     -     -     2.21     Skin Irrit. 2: H310     -       Benzyl acctate     140-11-4     202-859- 9     603-057- 00-5     -     0.1 - 0.5     Acute Tox. 4: H312     -       H319     STOT RE 1: H370     -     0.1 - 0.5     Acute Tox. 4: H312     -       Buryl acctate     123-86-4     204-658- 1     607-025- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H225							Carc. 1: H350	
Isopentyl acetate     123-92-2     204-662- 3     607-130- 00-2     0.5 - 1     Flam. Liq. 3: H373     -       Benzyl acetate     140-11-4     205-399- 7     -     -     2.21     Skin Irrit. 2: H315     -       Benzyl acetate     140-11-4     205-399- 7     -     -     2.21     Skin Irrit. 2: H315     -       Benzyl acetate     140-11-4     205-399- 7     -     -     2.21     Skin Irrit. 2: H315     -       Benzyl acetate     140-11-4     205-399- 7     -     -     2.21     Skin Irrit. 2: H313     -       Benzyl acetate     100-51-6     202-859- 9     603-057- 00-5     -     0.1 - 0.5     Acute Tox. 4: H312     -       H370     STOT RE 1: H370     -     -     0.1 - 0.5     Acute Tox. 4: H312     -       Benzyl acetate     123-86-4     204-658- 00-5     607-025- 00-5     -     0.1 - 0.5     Acute Tox. 4: H313     -       Butyl acetate     123-86-4     204-658- 00-5     607-025- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H333     -       Hathyl ac							Repr. 1: H360	
Isopentyl     123-92-2     204-662- 3     607-130- 00-2     -     0.5 - 1     H372 Filmu Liq, 3: H333     -       Benzyl     140-11-4     205-399- 7     -     -     0.21     Skin Irrit. 2: H315     -     -     130- Figure 12: H315     -     -     0.5 - 1     Figure 12: H315     -     -     -     -     140-11     -							STOT RE 1:	
Isopentyl acctute     123-92-2     204-662- 3     607-130- 00-2     -     0.5 - 1     Flam. Liq. 3: H373     -       Benzyl acctute     140-11.4     205-399- 7     -     -     2.21     Skin I/mit. 2: H319     -     -       Benzyl acctute     140-11.4     205-399- 7     -     -     2.21     Skin I/mit. 2: H315     -       Benzyl acctute     140-11.4     205-399- 7     -     -     2.21     Skin I/mit. 2: H336     -       Benzyl acctute     140-11.4     205-399- 7     -     -     2.21     Skin I/mit. 2: H336     -       Benzyl acctute     140-11.4     202-859- 00-5     603-057- 00-5     -     0.1 - 0.5     Acute Tox. 4: H332     -       Benzyl alcohol     100-51-6     202-859- 00-5     603-057- 00-5     -     0.1 - 0.5     Acute Tox. 4: H331     -       Benzyl acctate     123-86-4     204-658- 00-1     607-025- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H333     -       Butyl acctate     123-86-4     204-658- 00-1     607-025- 00-5     -     0.01 - 0.1							H372	
Isopentyl acctate     123-92-2 3     204-662- 00-2     607-130- 00-2     -     0.5 - 1     Flam. Liq. 3: H226     -       Benzyl acctate     140-11-4     205-399- 7     -     -     2.21     Skin Trit. 2: H319     -     -       Benzyl acctate     140-11-4     205-399- 7     -     -     2.21     Skin Trit. 2: H315     -       Benzyl acctate     140-11-4     205-399- 7     -     -     2.21     Skin Trit. 2: H315     -       Benzyl acctate     140-11-4     205-399- 7     -     -     2.21     Skin Trit. 2: H316     -       Benzyl acctate     140-11-4     205-399- 7     -     -     2.21     Skin Trit. 2: H319     -       Benzyl alcohol     100-51-6     202-859- 9     603-057- 00-5     -     0.1 - 0.5     Acatte Tox. 4: H312     -       Benzyl acctate     123-86-4     204-658- 1     607-025- 00-5     -     0.1 - 0.5     Acatte Tox. 4: H312     -       Benzyl acctate     123-86-4     204-658- 1     607-025- 00-1     -     0.01 - 0.1     Flam. Liq. 2: H335 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>STOT RE 2.</td> <td></td>							STOT RE 2.	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$							Н373	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Iconontul	102.02.2	204 ((2	(07.120		0.5 1		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	isopentyi	123-92-2	204-662-	607-130-	-	0.5 - 1	Flam. Liq. 3:	-
Benzyl acetate     140-11-4     205-399- 7     -     -     2.21     Skin Irrit. 2: H315     -       Benzyl acetate     140-11-4     205-399- 7     -     -     2.21     Skin Irrit. 2: H315     -       Benzyl acetate     140-11-4     205-399- 7     -     -     2.21     Skin Irrit. 2: H315     -       Benzyl acetate     140-11-4     205-399- 7     -     -     2.21     Skin Irrit. 2: H373     -       Benzyl alcohol     100-51-6     202-859- 9     603-057- 00-5     -     0.1 - 0.5     Acute Tox. 4: H312     -       Batyl acetate     123-86-4     204-658- 1     607-025- 00-1     -     0.01 - 0.1     Flam. Liq. 2: H319     -       Butyl acetate     123-86-4     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H319     -       Butyl acetate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H336     -       Ethyl acetate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H336	acetate		3	00-2			H226	
Berryl acetate     140-11-4     205-399- 7     -     -     2.21     Skin Imit. 2: H336       Berryl acetate     140-11-4     205-399- 7     -     -     2.21     Skin Imit. 2: H336     -       Berryl acetate     140-11-4     205-399- 7     -     -     2.21     Skin Imit. 2: H336     -       Berryl acetate     100-51-6     202-859- 9     -     -     0.1 - 0.5     Acute Tox. 4: H312       Berryl alcohol     100-51-6     202-859- 9     603-057- 00-5     -     0.1 - 0.5     Acute Tox. 4: H312     -       Buryl acetate     123-86-4     204-658- 1     607-025- 00-1     -     0.01 - 0.1     Flam. Liq. 2: H319     -       Buryl acetate     123-86-4     204-658- 1     607-022- 00-1     -     0.01 - 0.1     Flam. Liq. 2: H319     -       Buryl acetate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H336     -       H319     STOT SE 3: H336     H336     -     -     -     -       Buryl acetate     141-78-6 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>Skin Irrit. 2:</td><td></td></td<>							Skin Irrit. 2:	
Berrzyl acetate     140-11-4     205-399- 7     -     -     2.21     Skin Irrit. 2: H319     -     -       Berrzyl acetate     140-11-4     205-399- 7     -     -     2.21     Skin Irrit. 2: H315     -     -       Berrzyl acetate     140-11-4     205-399- 7     -     -     2.21     Skin Irrit. 2: H315     -     -       Berrzyl alcohol     100-51-6     202-859- 9     603-057- 00-5     -     0.1 - 0.5     Acute Tox. 4: H310     -     -       Berrzyl alcohol     100-51-6     202-859- 9     603-057- 00-5     -     0.1 - 0.5     Acute Tox. 4: H310     -       Butyl acetate     123-86-4     204-658- 1     607-025- 00-1     -     0.01 - 0.1     Flam. Liq. 2: H319     -       Butyl acetate     123-86-4     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H319     -       Butyl acetate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H319     -       H319     H319     H319     H319     -							H315	
Benzyl acetate     140-11-4     205-399- 7     -     -     2.21     Skin Imit. 2: H316 STOT SE 3: H316     -       Benzyl acetate     140-11-4     205-399- 7     -     -     2.21     Skin Imit. 2: H317     -       Benzyl acetate     140-11-4     205-399- 7     -     -     2.21     Skin Imit. 2: H319     -       Benzyl alcohol     100-51-6     202-859- 9     603-057- 00-5     -     0.1 - 0.5     Acute Tox. 4: H312     -       Benzyl alcohol     100-51-6     202-859- 9     603-057- 00-5     -     0.1 - 0.5     Acute Tox. 4: H312     -       Butyl acetate     123-86-4     204-658- 1     607-025- 00-1     -     0.01 - 0.1     Flam. Liq. 2: H319     -       Butyl acetate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H335     -       Butyl acetate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H336     -       H319 H319 H319 H319     H319 H319     H319 H319     -     -     -							Eve Irrit. 2:	
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Benzyl acetate     140-11-4     205-399- 7     -     -     2.21     Skin Irrit. 2: H315     -     -       Benzyl acetate     140-11-4     205-399- 7     -     -     2.21     Skin Irrit. 2: H315     -     -       Benzyl acetate     140-11-4     205-399- 7     -     -     2.21     Skin Irrit. 2: H315     -     -       Benzyl acetate     100-51-6     202-859- 9     603-057- 00-5     -     0.1 - 0.5     Acute Tox. 4: H312     -     -       Benzyl alcohol     100-51-6     202-859- 9     603-057- 00-5     -     0.1 - 0.5     Acute Tox. 4: H312     -       Butyl acetate     123-86-4     204-658- 1     607-025- 00-1     -     0.01 - 0.1     Flam. Liq. 2: H319     -       Butyl acetate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H336     -       Ethyl acetate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H336     -       H306     -     -     -     -     -							STOT SE 2.	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$							JI225	
Benzyl acetate     140-11-4     205-399- 7     -     -     2.21     Skin Irrit. 2: H315     -       Benzyl acetate     140-11-4     205-399- 7     -     -     2.21     Skin Irrit. 2: H315     -     -       Benzyl acetate     140-11-4     205-399- 7     -     -     2.21     Skin Irrit. 2: H315     -     -       Benzyl alcohol     100-51-6     202-859- 9     603-057- 00-5     -     0.1 - 0.5     Acute Tox. 4: H312     -       Benzyl alcohol     100-51-6     202-859- 9     603-057- 00-5     -     0.1 - 0.5     Acute Tox. 4: H312     -       Butyl acetate     123-86-4     204-658- 1     607-025- 00-1     -     0.01 - 0.1     Flam. Liq. 2: H333     -       Butyl acetate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H319     -       H319     -     -     0.01 - 0.1     Flam. Liq. 2: H319     -     -       Butyl acetate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H319								
Benzyl acetate     140-11-4     205-399- 7     -     -     2.21     Skin Irrit. 12: H315     -       Benzyl acetate     140-11-4     205-399- 7     -     -     2.21     Skin Irrit. 12: H319     -       Benzyl acohol     100-51-6     202-859- 9     -     -     0.1 - 0.5     Acute Tox. 4: H312       Benzyl alcohol     100-51-6     202-859- 9     603-057- 00-5     -     0.1 - 0.5     Acute Tox. 4: H312     -       Benzyl acchal     123-86-4     204-658- 1     607-025- 00-1     -     0.01 - 0.1     Filam. Liq. 2: H319     -       Butyl acctate     123-86-4     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Filam. Liq. 2: H319     -       Butyl acctate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Filam. Liq. 2: H319     -       Butyl acctate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Filam. Liq. 2: H319     -       H319     STOT SE 3: H336     -     H325     -     -       H319     Acute Tox.							STOT SE 3:	
Benzyl acetate     140-11-4     205-399- 7     -     -     2.21     Stron TRE 1: H315     -       Benzyl acetate     140-11-4     205-399- 7     -     -     2.21     Strin Irrit. 2: H319     -     -       Benzyl alcohol     100-51-6     202-859- 9     603-057- 00-5     -     0.1 - 0.5     Acute Tox. 4: H312     -       Benzyl alcohol     100-51-6     202-859- 9     603-057- 00-5     -     0.1 - 0.5     Acute Tox. 4: H312     -       Benzyl alcohol     123-86-4     204-658- 1     607-025- 00-1     -     0.01 - 0.1     Flam. Liq. 2: H319     -       Butyl acetate     123-86-4     205-500- 00-1     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H319     -       Butyl acetate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H319     -       H319     H319     H319     H332     -     -     -       Butyl acetate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H319     -							H336	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$							STOT RE 1:	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$							H372	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Benzyl	140-11-4	205-399-	_	_	2.21	Skin Irrit. 2:	_
Benzyl alcohol     100-51-6     202-859- 9     603-057- 00-5     -     0.1 - 0.5     Acute Tox. 4: H310       Benzyl alcohol     100-51-6     202-859- 9     603-057- 00-5     -     0.1 - 0.5     Acute Tox. 4: H312       Benzyl alcohol     123-86-4     204-658- 1     607-025- 00-1     -     0.01 - 0.1     Flam. Liq. 2: H319       Butyl acetate     123-86-4     204-658- 1     607-025- 00-1     -     0.01 - 0.1     Flam. Liq. 2: H319     -       Butyl acetate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H319     -       Butyl acetate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H319     -       H319     Acute Tox. 4: H335     H335     -     -     -     -       Butyl acetate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H319     -       H319     Acute Tox. 4: H319     -     -     -     -     -	acetate		7				H315	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			,				Evo Irrit 2.	
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$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$							H319	
Benzyl alcohol     100-51-6     202-859- 9     603-057- 00-5     -     0.1 - 0.5     Acute Tox. 4: H373       Benzyl alcohol     100-51-6     202-859- 9     603-057- 00-5     -     0.1 - 0.5     Acute Tox. 4: H312       Benzyl alcohol     123-86-4     204-658- 1     607-025- 00-1     -     0.01 - 0.1     Flam. Liq. 2: H319       Butyl acetate     123-86-4     204-658- 1     607-025- 00-1     -     0.01 - 0.1     Flam. Liq. 2: H319     -       Butyl acetate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H336     -       Ethyl acetate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H336     -       H319     Acute Tox, 4: H325     -     H336     -     -       H319     Acute Tox, 4: H331     -     -     -     -     -       H330     -     -     -     -     -     -     -       H336     -     -     -     -     -     -     -							STOT SE 3:	
Benzyl alcohol     100-51-6     202-859- 9     603-057- 00-5     -     0.1 - 0.5     Acute Tox. 4: H372       Benzyl alcohol     100-51-6     202-859- 9     603-057- 00-5     -     0.1 - 0.5     Acute Tox. 4: H312     -       Benzyl alcohol     110-51-6     202-859- 9     603-057- 00-5     -     0.1 - 0.5     Acute Tox. 4: H312     -       Butyl acctate     123-86-4     204-658- 1     607-025- 00-1     -     0.01 - 0.1     Flam. Liq. 2: H319     -       STOT SE 3: H336     1     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H319     -       Ethyl acctate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H319     -       H319     Acute Tox. 4: H325     -     -     -     -     -       Butyl acctate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H319     -     -       H319     Acute Tox. 4: H325     -     -     -     -     -     -       H319     Acute Tox. 4							H336	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$							STOT SE 1:	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$							H370	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$							STOT RE 1:	
Benzyl alcohol     100-51-6     202-859- 9     603-057- 00-5     -     0.1 - 0.5     Acute Tox. 4: H302     -       Benzyl alcohol     100-51-6     202-859- 9     603-057- 00-5     -     0.1 - 0.5     Acute Tox. 4: H312     -       Butyl acetate     123-86-4     204-658- 1     607-025- 00-1     -     0.01 - 0.1     Flam. Liq. 2: H319     -       Butyl acetate     123-86-4     205-500- 4     607-022- 00-1     -     0.01 - 0.1     Flam. Liq. 2: H336     -       Ethyl acetate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H336     -       Ethyl acetate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H336     -       Ethyl acetate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H336     -       H319     Acute Tox. 4: H332     -     -     -     -       H319     Acute Tox. 4: H332     -     -     -     -							H372	
Benzyl alcohol     100-51-6     202-859- 9     603-057- 00-5     -     0.1 - 0.5     Acute Tox. 4: H302 Acute Tox. 4: H312     -       Benzyl alcohol     100-51-6     202-859- 9     603-057- 00-5     -     0.1 - 0.5     Acute Tox. 4: H312     -       Butyl acetate     123-86-4     204-658- 1     607-025- 00-1     -     0.01 - 0.1     Flam. Liq. 2: H319     -       Butyl acetate     123-86-4     204-658- 1     607-022- 00-1     -     0.01 - 0.1     Flam. Liq. 2: H319     -       Butyl acetate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H319     -       Butyl acetate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H319     -       H332     STOT SE 3: H332     -     -     -     -     -							STOT RE 2	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$							U272	
Benzyl alcohol     100-51-6     202-859- 9     603-057- 00-5     -     0.1 - 0.5     Acute Tox. 4: H302     -       Acute Tox. 4: H312     -     -     -     0.1 - 0.5     Acute Tox. 4: H312     -       Butyl acetate     123-86-4     204-658- 1     607-025- 00-1     -     0.01 - 0.1     Flam. Liq. 2: H319     -       Butyl acetate     123-86-4     204-658- 1     607-025- 00-1     -     0.01 - 0.1     Flam. Liq. 2: H319     -       Butyl acetate     123-86-4     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H319     -       Butyl acetate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H336     -       Ethyl acetate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H319     -       H319     Acute Tox. 4: H332     -     -     -     -     -								
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$							Aquatic Chronic	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$							3: H412	
alcohol   9   00-5   H302     Acute Tox. 4:   H312   Eye Irrit. 2:     H319   Acute Tox. 3:   H319     Acute Tox. 3:   H319     Butyl   123-86-4   204-658-   607-025-   -     1   00-1   Flam. Liq. 2:   -     H319   H225   -   -     Butyl   123-86-4   204-658-   607-025-   -     00-1   00-1   Flam. Liq. 2:   -     H319   STOT SE 3:   H335     STOT SE 3:   H336   -     Ethyl   141-78-6   205-500-   607-022-   -   0.01 - 0.1   Flam. Liq. 2:   -     Acute Tox. 4:   H336   -   -   -   -   -     acetate   141-78-6   205-500-   607-022-   -   0.01 - 0.1   Flam. Liq. 2:   -     H319   Acute Tox. 4:   H319   -   -   -     Acute Tox. 4:   H332   -   -   -   -     Acute Tox. 4:   H332   -   -   -   -	Benzyl	100-51-6	202-859-	603-057-	-	0.1 - 0.5	Acute Tox. 4:	-
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	alcohol		9	00-5			H302	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$							Acute Tox. 4:	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$							H312	
Butyl acetate     123-86-4     204-658- 1     607-025- 00-1     -     0.01 - 0.1     Flam. Liq. 2: H331     -       Butyl acetate     123-86-4     204-658- 1     607-025- 00-1     -     0.01 - 0.1     Flam. Liq. 2: H225     -     -       Butyl acetate     1     00-1     -     0.01 - 0.1     Flam. Liq. 2: H319     -     -       Butyl acetate     1     00-1     -     0.01 - 0.1     Flam. Liq. 2: H319     -     -       Butyl acetate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H326     -       Butyl acetate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H319     -       Acute Tox. 4: H332     H332     -     -     -     -							Eve Irrit 2.	
Butyl acetate     123-86-4     204-658- 1     607-025- 00-1     -     0.01 - 0.1     Flam. Liq. 2: H331     -       Butyl acetate     1     00-1     -     0.01 - 0.1     Flam. Liq. 2: H339     -       Butyl acetate     1     00-1     -     0.01 - 0.1     Flam. Liq. 2: H335     -       Butyl acetate     1     00-1     -     0.01 - 0.1     Flam. Liq. 2: H336     -       Butyl acetate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H336     -       Butyl acetate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H319     -       Acute Tox. 4: H332     H336     -     -     -     -       Butyl acetate     -     4     00-5     -     0.01 - 0.1     Flam. Liq. 2: H319     -       Acute Tox. 4: H332     -     -     -     -     -     -       Butyl acetate     -     -     -     -     -     -     -       Butyl Butyl Buty							Н310	
Butyl acetate   123-86-4   204-658-   607-025-   -   0.01 - 0.1   Flam. Liq. 2:   -     Butyl acetate   1   00-1   -   0.01 - 0.1   Flam. Liq. 2:   -     H319   STOT SE 3:   -   H335   -   H335   -   -     Ethyl acetate   141-78-6   205-500-   607-022-   -   0.01 - 0.1   Flam. Liq. 2:   -     Acetate   141-78-6   205-500-   607-022-   -   0.01 - 0.1   Flam. Liq. 2:   -     H336   -   -   -   0.01 - 0.1   Flam. Liq. 2:   -     H336   -   -   0.01 - 0.1   Flam. Liq. 2:   -     H336   -   -   0.01 - 0.1   Flam. Liq. 2:   -     H319   -   -   -   -   -     H319   -   -   -   -   -     H332   -   -   -   -   -     H332   -   -   -   -   -							A sute Terr 2.	
Butyl acetate     123-86-4     204-658- 1     607-025- 00-1     -     0.01 - 0.1     Flam. Liq. 2: H225     -       Butyl acetate     1     00-1     -     0.01 - 0.1     Flam. Liq. 2: H225     -     -       Butyl acetate     1     00-1     -     0.01 - 0.1     Flam. Liq. 2: H319     -     -       STOT SE 3: H336     -     -     0.01 - 0.1     Flam. Liq. 2: H336     -     -       Ethyl acetate     141-78-6     205-500- 4     607-022- 00-5     -     0.01 - 0.1     Flam. Liq. 2: H225     -       Butyl Bacetate     -     4     -     -     -     -       Bacetate     -     4     00-5     -     0.01 - 0.1     Flam. Liq. 2: H319     -       Acute Tox. 4: H332     -     -     -     -     -     -							Acute Tox. 5.	
Butyl   123-86-4   204-658- $607-025-$ - $0.01-0.1$ Flam. Liq. 2:   -     acetate   1 $00-1$ - $0.01-0.1$ Flam. Liq. 2:   -   H225     Eye Irrit. 2:   H319   STOT SE 3:   H335   STOT SE 3:   H336     Ethyl   141-78-6   205-500- $607-022-$ - $0.01-0.1$ Flam. Liq. 2:   -     acetate   141-78-6   205-500- $607-022-$ - $0.01-0.1$ Flam. Liq. 2:   -     Acetate   141-78-6   205-500- $607-022-$ - $0.01-0.1$ Flam. Liq. 2:   -     M336   H325   Eye Irrit. 2:   H319   -   H325   -     Acute Tox. 4:   H332   STOT SE 3:   H332   -   -		100.06.4	204 (50	607.005		0.01.01	H331	
acetate   1   00-1   H225     Eye Irrit. 2:   H319   STOT SE 3:     H335   STOT SE 3:   H336     Ethyl   141-78-6   205-500-   607-022-   -   0.01 - 0.1   Flam. Liq. 2:   -     acetate   4   00-5   -   0.01 - 0.1   Flam. Liq. 2:   -     H319   Acute Tox. 4:   H332   STOT SE 3:   -	Butyl	123-86-4	204-658-	607-025-	-	0.01 - 0.1	Flam. L1q. 2:	-
Ethyl   141-78-6   205-500-   607-022-   -   0.01 - 0.1   Flam. Liq. 2:   -     Acute Tox. 4:   H319   H225   Eye Irrit. 2:   H336   -     Ethyl   141-78-6   205-500-   607-022-   -   0.01 - 0.1   Flam. Liq. 2:   -     Acute Tox. 4:   H319   Acute Tox. 4:   H332   STOT SE 3:   -	acetate		1	00-1			H225	
Ethyl   141-78-6   205-500-   607-022-   -   0.01 - 0.1   Flam. Liq. 2:   -     acetate   4   00-5   -   0.01 - 0.1   Flam. Liq. 2:   -     H336   -   H325   -   H325   -     STOT SE 3:   -   H325   -   -     H336   -   H325   -   -     H319   Acute Tox. 4:   -   -   -     H332   STOT SE 3:   -   -   -							Eye Irrit. 2:	
Ethyl     141-78-6     205-500-     607-022-     -     0.01 - 0.1     Flam. Liq. 2:     -       acetate     4     00-5     -     0.01 - 0.1     Flam. Liq. 2:     -       H336     -     4     00-5     -     0.01 - 0.1     Flam. Liq. 2:     -       H336     -     -     -     0.01 - 0.1     Flam. Liq. 2:     -       H319     Acute Tox. 4:     H332     STOT SE 3:     -							H319	
Ethyl     141-78-6     205-500- 4     607-022- 00-5     -     0.01 – 0.1     Flam. Liq. 2: H225     -       Ethyl     141-78-6     205-500- 4     607-022- 00-5     -     0.01 – 0.1     Flam. Liq. 2: H225     -       Acute Tox. 4: H332     H332     -     -     -     -							STOT SE 3:	
Ethyl     141-78-6     205-500-     607-022-     -     0.01 – 0.1     Flam. Liq. 2:     -       acetate     4     00-5     -     0.01 – 0.1     Flam. Liq. 2:     -       H336     -     4     00-5     -     0.01 – 0.1     Flam. Liq. 2:     -       H319     Acute Tox. 4:     H332     -     H332     -							H335	
Ethyl 141-78-6 205-500- 607-022- - 0.01 - 0.1 Flam. Liq. 2: -   acetate 4 00-5 - 0.01 - 0.1 Flam. Liq. 2: -   H336 H225 Eye Irrit. 2: H319 Acute Tox. 4: H332   STOT SE 3: STOT SE 3: -							STOT SF 3	
Ethyl     141-78-6     205-500-     607-022-     -     0.01 – 0.1     Flam. Liq. 2:     -       acetate     4     00-5     -     0.01 – 0.1     Flam. Liq. 2:     -       H319     Acute Tox. 4:     H332     STOT SE 3:     -     -								
Luryi   141-78-0   205-300- $607-022-$ - $0.01-0.1$ Flam. Liq. 2:   -     acetate   4   00-5   5   Eye Irrit. 2:   H319     Acute Tox. 4:   H332   STOT SE 3:   STOT SE 3:	Ethri	141 79 6	205 500	607.022		0.01 0.1		
acetate   4   00-5   H225     Eye Irrit. 2:   H319     Acute Tox. 4:   H332     STOT SE 3:   STOT SE 3:	Einyi	141-78-6	205-500-	607-022-	-	0.01 - 0.1	Flam. Liq. 2:	-
Eye Irrit. 2: H319 Acute Tox. 4: H332 STOT SE 3:	acetate		4	00-5			H225	
H319 Acute Tox. 4: H332 STOT SE 3:							Eye Irrit. 2:	
Acute Tox. 4: H332 STOT SE 3:							H319	
H332 STOT SF 3:							Acute Tox. 4:	
STOT SF 3							H332	
							STOT SE 3:	

GRACEMATE POPPY/JASMIN DIA CHEMICAL CO., LTD. Page4 of 15 Date of issue: 12<sup>th</sup> May, 2017

						H335	
						STOT SE 3:	
						H336	
2-	110-19-0	203-745-	607-026-	-	0.01 - 0.1	Flam. Liq. 2:	-
Methylpr		1	00-7			H225	
opyl						Eve Irrit. 2:	
acetate						H319	
						Acute Tox 4	
						Н222	
						STOT SE 2.	
						STOT SE 5:	
						H335	
						STOT SE 3:	
						H336	
Benzyl	120-51-4	204-402-	607-085-	-	0.01 - 0.1	Acute Tox. 4:	-
benzoate		9	00-9			H302	
						Aquatic Chronic	
						2: H411	
Galaxolid	1222-05-	214-946-	603-212-	_	0.05 - 0.1	Repr. 2: H361	_
e	5	9	00-7		0.02 0.1	Aquatic Acute	
	5	,	00-7			1, U/00	
						1. 11400	
						Aquatic Chronic	
						1: H410	
Musk	81-14-1	201-328-	609-069-	-	0.0015 -	STOT SE 3:	-
ketone		9	00-7		0.015	H336	
						Carc. 2: H351	
						Repr. 2: H361	
						Aquatic Acute	
						1: H400	
						Aquatic Chronic	
						1: H410	
Castor	72245-	_	_	_	5		_
oil.	04-6	_	_	_	5	_	_
hydrogen	04-0						
ated							
ethoxylat							
ed							
propoxyla							
ted							
Docusate	577-11-7	209-406-	_	_	0.73 - 0.75	Skin Irrit 2.	_
sodium	577 11 7	205 100			0.75 0.75	H315	
		-				Eva Irrit 2.	
						Lye IIII. 2.	
						H319	
						Repr. 2: H361	
						Lact. : H362	
						Aquatic Chronic	
						3: H412	
Water	7732-18-	231-791-	-	-	40.2	-	-
	5	2					

\* Registration numbers of ingredients which shall be in compliance with Regulation (EC) No 1907/2006 will be filled in later.

\*\* Full texts of relevant hazard statements and risk phrases can be seen in SECTION 16 of this SDS.

<b>SECTION 4: First aid measures</b>	
4.1. Description of first aid measures	
IF INHALED	If you feel unwell, get medical advice/ attention immediately and at rest. If symptoms continue, call a doctor/physician.
IF ON SKIN	Rinse with plenty of water and soap. If symptoms continue, call a doctor/physician.
IF IN EYES	Immediately rinse cautiously with water for 15 - 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms continue, call a doctor/physician.
IF SWALLOWED	Rinse mouth. Immediately get medical advice/attention.

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

Causes serious eye irritation May cause respiratory irritation May cause drowsiness or dizziness May cause daracer May damage fertility or the unborn child May cause harm to breast-fed children May cause damage to organs Causes damage to organs through prolonged or repeated exposure May cause damage to organs through prolonged or repeated exposure

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

No information

#### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

### Suitable extinguishing media:

Use water mist, dry chemical powder, alcohol resistance foam or carbon dioxide.

#### Unsuitable extinguishing media

Applying direct water may be dangerous because fire may expand to surroundings.

### 5.2. Special hazards arising from the substance or mixture

In case of fire, toxic decomposition products may be generated.

### 5.3. Advice for firefighters

Cut off any ignition sources and extinguish with an appropriate agent. Cool the surrounding tank and the buildings with direct water jet to avoid risk of fire spreading. Take action from windward. Keep out except responsible personnel. Move container to a safe area if it can be done without risk.

#### **SECTION 6: Accidental release measures**

### 6.1. Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel:

Wear suitable protective equipment (see SECTION 8) e.g., safety gloves, protective mask and/or protective glasses to prevent exposure.

#### For emergency responders:

Keep out except responsible personnel. Wear suitable protective equipment described in "SECTION 8: Exposure controls/ personal protection"

#### 6.2. Environmental precautions

Avoid release into the environment because product may cause local effects.

### 6.3. Methods and material for containment and cleaning up

Stop leak if you can do it without risk.

In case of small amounts, wipe off spilled material with waste or wiping cloth and collect it in an adequate waste container.

If case of large amounts, prevent leakage and enclose by embankment.

Do not eat or drink near handling and storage locations.

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Prevent to flowing into drains, sewers, basements or closed areas.

#### 6.4. Reference to other sections

Refer to "SECTION 8: Exposure controls/personal protection" and "SECTION 13: Disposal considerations" as appropriate.

#### **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling

#### **Protective measures:**

Install appropriate equipment and wear suitable protective apparatus described in "SECTION 8: Exposure controls/ personal protection". Keep away from heat/sparks/open flames/hot surfaces. No smoking. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

## Advice on general occupational hygiene:

Wash hands thoroughly after handling.

# 7.2. Conditions for safe storage, including any incompatibilities

#### **Technical measures:**

Install appropriate equipment and wear suitable protective apparatus described in "SECTION 8: Exposure controls/ personal protection".

#### **Incompatible materials:**

Oxidizing agents

### Conditions for safe storage:

Avoid sunlight. Store in a cool place. Avoid high-temperature materials.

#### **Packing material:**

Use a sealed container without damage or leakage.

#### 7.3. Specific end use(s)

Oxidizing agents

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

#### 8.1. Control parameters

Acceptable concentration (exposure limit, biological exposure index)

EU IOELV-8hr (2000)	50 ppm (Isopentylacetate)
EU IOELV-Short term (2000)	100 ppm (Isopentylacetate)
UK HSE WELs-8hr TWA (2011)	1,000 ppm (Ethanol) 150 ppm (Butyl acetate) 200 ppm (Ethyl acetate)
	150 ppm (Isobutyl acetate)
UK HSE WELs-Short term (2011)	200 ppm (Butyl acetate)
OK HSE WEES-Short term (2011)	400 ppm (Ethyl acetate)
	187 ppm (Isobutyl acetate)
ACGIH TLV-TWA (2016)	50 ppm (Isopentyl acetate)
	10 ppm (Benzyl acetate)
	50 ppm (Butyl acetates, all isomers)
	400 ppm (Ethyl acetate)
ACGIH TLV-STEL (2016)	1,000 ppm (Ethanol)
	100 ppm (Isopentyl acetate)
	150 ppm (Butyl acetates, all isomers)

# 8.2. Exposure controls

# Appropriate engineering controls:

Shower and eye washer should be available in the work area. Under high temperature or in case of mist generation, use ventilation.

# Personal protective equipment:

Respiratory protection	Wear appropriate protective mask or air aspirator as required.
Hand protection	If hand contact is possible, wear protective gloves.
Eye protection	Wear safety glasses or goggles if in eyes.
Skin and body protection	Wear protective clothing and apron if necessary.

# **SECTION 9: Physical and chemical properties**

# 9.1. Information on basic physical and chemical properties

Appearance	Liquid
(physical state, form and colour)	
Ödour	Jasmin odour
Odour threshold	No information
рН	No information
Melting point/freezing point	No information
Initial boiling point and boiling range	No information
Flash point	22°C
Evaporation rate	No information
Flammability (solid, gas)	No information
Upper/lower flammability or	No information
explosive limits	
Vapour pressure	No information
Vapour density	No information
Relative density	No information
Solubility (ies)	No information
Partition coefficient: <i>n</i> -octanol/water	No information
Auto-ignition temperature	No information
Decomposition temperature	No information
Viscosity	No information
Explosive properties	No information
Oxidising properties	No information

# 9.2. Other information

No information

# **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

Stable under normal handling condition.

#### 10.2. Chemical stability

Stable under normal handling condition.

#### 10.3. Possibility of hazardous reactions

No hazardous reaction expected under normal handling.

#### 10.4. Conditions to avoid

Avoid sunlight. Store in a cool place.

#### 10.5. Incompatible materials

Oxidizing agents

#### 10.6. Hazardous decomposition products

In case of fire, toxic decomposition products may be generated.

# **SECTION 11: Toxicological information**

# 11.1. Information on toxicological effects

Information on product:

No information

#### Information on ingredients:

Ethanol

Acute toxicity (oral):	Rat $LD_{50} = 6,200 \text{ mg/kg}$
Acute toxicity (dermal): Acute toxicity (inhalation: vapour): Serious eve damage/irritation:	Rabbit $LDL_0 = 20,000 \text{ mg/kg}$ Rat $LC_{50} = 66,280 \text{ppmV}$ (124.7 mg/L) Moderately irritating to rabbit eyes.
Carcinogenicity:	IARC classified as Group 1. (ethanol in alcoholic beverage)
Reproductive toxicity:	There are numerous reports that fetal alcohol syndrome which is characterized by growth deficiency, microcephaly, characteristic facial characteristics and mental retardation was
STOT-single exposure:	observed in the children of alcoholic women. By inhalation exposure to humans, the respiratory and eye irritant effects are reported. Severe intoxication is characterized by marked muscular incoordination, blurred or double vision, stupor, hypothermia, vomiting and nausea, and convulsions.
STOT-repeated exposure:	Long-term consumption of large doses of alcohol causes toxic effects in almost all organ systems. The most affected target organ is the liver; beginning with fatty degeneration, damage can progress via necrosis and fibrotic stages to liver cirrhosis.

Isopentyl acetate

Acute toxicity (oral):	Rat $LD_{50} = 16,600 \text{ mg/kg}$
Skin corrosion/irritation:	In the rabbit skin irritation test, "slight irritation" was observed. In addition, there is a report that "Disappearance of the test substance of a remarkable rate can be because of volatile at the time of application" on repetitive application test of this substance on human skin. And 197 subjects did not observe irritation at all
Serious eye damage/irritation:	The result of an eye irritation examination of the rabbit which used the isomer mixture as the test substance is mild (2nd of ten steps of stimulative scales), and this substance or an isomer mixture by inhalation exposure irritation is reported to
STOT-single exposure:	the eye or the conjunctiva in humans. By this product or inhalation of a isomer mixture exposure, in humans, the upper respiratory conditions, such as nose, pharynx, respiratory tract, etc. is mainly reported, and there is also report that it have strong irritation especially an respiratory tract, and respiratory irritation was suggested
STOT-repeated exposure:	Furthermore, the anesthetic actions was observed in rat, and moderate central nerve inhibition in cat, and drowsiness in dog was reported. There is a statement that visual field constriction is reported by part of humans who received occupation exposure of the isomer mixtures and also neurotoxicity is occurred. Moreover, the histologically degeneration of the optic nerve is acknowledged in repeated exposure to the rabbit.
Benzyl acetate	
Acute toxicity (oral):	Rat $LD_{50} = 2,490 \text{ mg/kg}$
Acute toxicity (dermal):	Rabbit $LD_{50} > 5,000 \text{ mg/kg}$
Skin corrosion/irritation:	It was reported that this material caused irritation of skin, eyes and throat.
Serious eye damage/irritation:	This material caused eyes irritation of human and rabbit.
STOT-single exposure:	There is the statement that respiratory irritation and anesthetic actions in humans, and pulmonary congestion, and pulmonary edemas in mouse by steam exposure, and inhibitation of central nerve.
STOT-repeated exposure:	There is the statement that this material causes disorders in the kidney of the humans by continuous inhalation exposure. In addition, there is the statement that atrophy and degeneration of nasal mucosas, hyperplasia of nasal submucosal, and the pigmentation of the nasal-mucosa epithelium were observed in feed administration to mice.
Benzyl alcohol	
Acute toxicity (oral):	Rat $LD_{50} = 1,230 \text{ mg/kg}$
Acute toxicity (dermal): Acute toxicity (inhalation: vapour):	Rabbit $LD_{50} = 2,000 \text{ mg/kg}$ Rat $LC_{50} = 12.5 \text{ mg/L/4h}$
Serious eye damage/irritation:	The results of eye irritation tests using rabbits (OECD TG 405) showed that the substance was moderately irritating.
Butyl acetate	

Acute toxicity (oral):	Rat $LD_{50} > 3,200 \text{ mg/kg}$		
Acute toxicity (dermal):	Rabbit $LD_{50} > 5,000 \text{ mg/kg}$		
Serious eye damage/irritation: STOT-single exposure:	In a test where 0.1 mL undiluted substance was applied into the eyes of rabbits, maximum irritation was observed at 24- hour after application, at which time the mean scores were <1 for corneal opacity, 0 for iris, 1 for conjunctivae redness and <1 for chemosis. The MMAS was less than 30 and the effects were almost reversed within 7 days. In other rabbit tests, results of no irritating or mild irritating were reported. This substance causes respiratory tract irritation. In human, by expose of vapour, these symptoms were observed; headache, nausea. In case of high concentration, dizziness, difficult breathing, unconsciousness and weakness were observed. In a rat inhalation test, coordination disturbance, labored breathing and nesthetic action were observed at 1.3 mg/L exposure. In another rat and mouse oral test, central nervous system depression, coordination disturbance, weakness and hypothermia were reported at 10,736 mg/kg exposure.		
Ethyl acetate			
Acute toxicity (oral):	Rat $LD_{50} = 4,940 \text{ mg/kg}$		
Acute toxicity (dermal): Acute toxicity (inhalation: vapour):	Rabbit LD <sub>50</sub> > 18,000 mg/kg Rat LC <sub>50</sub> = 3,658ppmV		
Serious eye damage/irritation:	There is a report of a Draize test using 4 rabbits where corneal opacity (4/4) was resolved within 2 days, iritis (1/4) was resolved within 2 days, conjunctivae redness, chemosis and discharge (4/4) disappeared by 7 days after application of 0.1 mL to the eyes, and the MMAS (Modified Maximum Average Score) at 24, 48 and 72-hour after application was calculated to be 15.0. As relevant information, the substance is classified as Xi; R36 in EU classification.		
Specific target organ toxicity (single exposure):	It was reported that exposure of volunteers for 4-hour to 400 ppm of the substance led to slight irritation of the eyes, nose and throat. There is a report that the inhalation exposure to cats and mice and the oral exposure to rabbits caused narcotic effects at dose levels of equal to or less than the $LD_{50}$ value. The effects are transient.		
2-Methylpropyl acetate			
Acute toxicity (oral):	Rat $LD_{50} > 3,200 \text{ mg/kg}$		
Acute toxicity (dermal): Acute toxicity (inhalation: vapour):	Rabbit $LD_{50} > 5,000 \text{ mg/kg}$ Rat $LC_{50} > 4,000 \text{ppm/4h}$		
Acute toxicity (inhalation: dust/mist):	Rat $LC_{50} = 21.3 \text{ mg/L/4h}$		
Serious eye damage/irritation:	In rabbit tests, slight eye irritation was observed.		
STOT-single exposure:	This substance causes respiratory tract irritation. In human inhalation test, dizziness, vomiting, sleepiness and unconsciousness were reported. In rat inhalation test, anesthetic action, labored breathing and coordination disturbance were obserbed at 21,301 ppm (101 mg/L) exposure.		
Benzyl benzoate			
Acute toxicity (oral):	Rat $LD_{50} = 1,880 \text{ mg/kg}$		
Acute toxicity (dermal):	$\begin{array}{l} \text{Kat } LD_{50} = 4.46 \text{ g/kg} \\ \text{Rabbit } LD_{50} = 4 \text{ g/kg} \end{array}$		

Galaxolide	
Acute toxicity (oral):	Rat $LD_{50} > 3,000 \text{ mg/kg}$
Acute toxicity (dermal):	Rat $LD_{50} > 6,500 \text{ mg/kg}$ Rabbit $LD_{50} > 3,250 \text{ mg/kg}$
Reproductive toxicity:	There no data about the reproductive effect of human. However, there were reports that this substance was detected in breast feed.
Musk ketone	
Acute toxicity (oral):	Rat LD <sub>50</sub> > 2,000 mg/kg
Acute toxicity (dermal): Carcinogenicity:	Rabbit LD <sub>50</sub> > 2,000 mg/kg This material is classified as "Carc. 2: H351" in EU CLP.
Reproductive toxicity:	In rat oral developmental toxicity studies, developmental toxicity (higher rate of preimplantation deaths, decrease of fetal body weight) was observed at the administration which observed maternal toxicity (suppressant for weight increase, feed intake reduction).
STOT-single exposure:	In rat oral test, hyperactivity, sedation and lethargic sleep were observed.
Docusate sodium	
Acute toxicity (oral):	Rat $LD_{50}$ = approx. 2,000 mg/kg
Acute toxicity (dermal):	Rabbit $LD_{50} > 10 \text{ g/kg}$
Skin corrosion/irritation:	In rabbit irritation tests that exposure 0.5 mL of this substance, the score at 24 hours later were 1.66 (red spots) and 2.5 (edema), and at 72 hours later were 1.66 (red spots) and 1.6 (edema). In this tests, necrosis and irreversible change were not observed.
Serious eye damage/irritation:	In rabbit irritation test that exposure 100 mg of this substance, necrosis and irreversible change were not observed. This substance was irritating. In a rabbit test that expose 250µg, mild irritation was reported.
Reproductive toxicity:	In pregnant rat test, increase of resorption and malformation of infant were reported. In three generation rats test mixed in feed (0, 0.5 or $1.0\%$ mixed), the breast milk caused control of weight gain and reduction of survival rate.
SECTION 12: Ecological information	

-	
12.1. Toxicity:	
Information on product:	No information
Information on ingredients:	
Ethanol	
Aquatic acute toxicity:	Algae ( <i>Chlorella</i> ) 96h $EC_{50} = 1,000 \text{ mg/L}$ Crustacea ( <i>Daphnia magna</i> ) 48h $EC_{50} = 5,463 \text{ mg/L}$ Eich (Deichenst traut) 96h LC = 11 200 mm
Aquatic chronic toxicity:	Crustacea ( <i>Ceriodaphnia dubia</i> ) 10d NOEC = $9.6 \text{ mg/L}$
Isopentyl acetate	
Aquatic acute toxicity: Aquatic chronic toxicity:	Crustacea ( <i>Daphnia magna</i> ) 24h $EC_{50} = 205 \text{ mg/L}$ No information

GRACEMATE POPPY/JASMIN DIA CHEMICAL CO., LTD. Page12 of 15 Date of issue: 12<sup>th</sup> May, 2017

Benzyl acetate	
Aquatic acute toxicity:	Fish ( <i>Oryzias latipes</i> ) 96h $LC_{50} = 4 \text{ mg/L}$
Aquatic chronic toxicity:	Fish ( <i>Oryzias latipes</i> ) 28d NOEC = 0.92 mg/L
Benzyl alcohol	
Aquatic acute toxicity:	Fish ( <i>Fathead minnow</i> ) 96h $LC_{50} = 460 \text{ mg/L}$ Crustacea ( <i>Daphnia magna</i> ) 48h $EC_{50} = 230 \text{mg/L}$
Aquatic chronic toxicity:	No information
Butyl acetate	
Aquatic acute toxicity:	Fish (Fathead minnow) 96h $LC_{50} = 18 \text{ mg/L}$
Aquatic chronic toxicity:	Algae ( <i>Scenedesmus</i> ) 72h $EC_{10} = 296 \text{ mg/L}$
Ethyl acetate	
Aquatic acute toxicity:	Fish (Fathead minnow) 96h $LC_{50} = 230 \text{ mg/L}$
Aquatic chronic toxicity:	Crustacea ( <i>Daphnia magna</i> ) 24n LC <sub>50</sub> = $2,500 \text{ mg/L}$ No information
2-Methylpropyl acetate	
Aquatic acute toxicity: Aquatic chronic toxicity:	Fish ( <i>Oryzias latipes</i> ) 96h $LC_{50} = 17 \text{ mg/L}$
	Crustacea ( <i>Daphnia magna</i> ) 21d NOEC = 23 mg/L
Benzyl benzoate	
Aquatic acute toxicity:	Crustacea ( <i>a species of Grammaridea</i> ) 96h $LC_{50} = 4.8 \text{ mg/L}$
Aquatic chronic toxicity:	No information
Galaxolide	
Aquatic acute toxicity:	Crustacean (Acartia tonsa) 48h $LC_{50} = 0.47 \text{ mg/L}$
Aquatic chronic toxicity:	Crustacean ( <i>Acartia tonsa</i> ) 6d NOEC = $0.038 \text{ mg/L}$
Musk ketone	
Aquatic acute toxicity:	Algae ( <i>Pseudokirchneriella subcapitata</i> ) 72h $\text{ErC}_{50} = 0.24$ mg/L
Aquatic chronic toxicity:	Algae ( <i>Pseudokirchneriella subcapitata</i> ) 72h NOEC = 0.088 mg/L
Docusate sodium	
Aquatic acute toxicity:	Crustacea ( <i>Daphnia magna</i> ) 48h EC <sub>50</sub> = 19.0 mg/L Fish ( <i>Oryzias latings</i> ) 96h L $C_{50}$ = 68.2 mg/L
Aquatic chronic toxicity:	Crustacea ( <i>Daphnia magna</i> ) 21d NOEC = 7.03 mg/L
12.2. Persistence and degradability:	
Information on product:	No information
Information on ingredients:	
Ethanol	
BOD: 89%	

Benzyl acetate BOD: 95% Butyl acetate BOD: 98%	
2-Methylpropyl acetate	
Benzyl benzoate	
BOD: 90%	
Docusate sodium	
BOD: 0%	
12.3. Bioaccumulative potential:	
Information on product:	No information
Information on ingredients: Butyl acetate log Kow=1.78	
2-Methylpropyl acetate log Kow= 1.78 Benzyl benzoate	
$\log Pow = 2.07$	
12.4  Mobility in soil	
Information on product:	No information
mormation on product.	
Information on ingredients:	No information

# 12.5. Results of PBT and vPvB assessment:

The product does not meet the PBT and vPvB criteria.

# 12.6. Other adverse effects:

No information	
SECTION 13: Disposal considerations	

# 13.1. Waste treatment methods

Dispose of waste in accordance with applicable local, regional and international regulations and standards.

When disposing, consult to a certificated waste trader or local offices if they deal with the waste. Used container should be recycled after cleaning or dispose of in compliance with related laws and local regulations.

Contents should be removed completely when dispose of empty containers.

### **SECTION 14: Transport information**

14.1. UN number	1993
14.2. UN proper shipping name	FLAMMABLE LIQUID, n.o.s.
14.3. Transport hazard class(es)	3
14.4. Packing group	II
14.5. Environmental hazards	Not applicable

#### 14.6. Special precautions for user

When transporting, avoid direct sunlight. Confirm no leakage to containers. When loading, prevent containers from falling, dropping off or damaging. Take preventive measures of collapse.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and IBC code

Not applicable

#### **SECTION 15: Regulatory information**

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

The product and its ingredients are not regulated by specific provisions related to protection of human health or the environment at EU level, e.g. not considered as SVHCs or POPs.

#### 15.2. Chemical safety assessment

Not conducted

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

# Update history:

Date of issue: 12<sup>th</sup> May, 2017

#### **References:**

Information of DIA CHEMICAL CO., LTD. NITE GHS classification results (2017) ACGIH, American Conference of Governmental Industrial Hygienists (2016) TLVs and BEIs.

#### Relevant risk phrases of which do not appear elsewhere in this SDS

- H226: Flammable liquid and vapour
- H302: Harmful if swallowed
- H312: Harmful in contact with skin
- H315: Causes skin irritation
- H331: Toxic if inhaled
- H332: Harmful if inhaled
- H351: Suspected of causing cancer
- H361: Suspected of damaging fertility or the unborn child
- H370: Causes damage to organs
- H400: Very toxic to aquatic life
- H410: Very toxic to aquatic life with long lasting effects
- H411: Toxic to aquatic life with long lasting effects

# Abbreviations

PBT: Persistent, Bioaccumulative and Toxic substance POPs: Persistent Organic Pollutants STOT: Specific Target Organ Toxicity SVHC: Substances of Very High Concern vPvB: Very Persistent and Very Bioaccumulative

#### [Disclaimer]

This SDS has been prepared based on the best available information however, it may not be sufficient in some cases. It is user's responsibility to modify or update any contents in this SDS regarding information on hazardous properties and/or instruction for safe handling of the product when they become available. Precautionary measures in this SDS are only applicable for normal handling conditions and it is necessary to take appropriate additional measures to ensure

safe handling which depend on your specific use conditions or situations.