SAFETY DATA SHEET

502740 CASSIS BASE 345 B

1. IDENTIFICATION

Product Description: **CASSIS BASE 345 B**

CAS # MIXTURE

Other means of identification

Vigon Item # 502740

Recommended use Concentrated aromatic ingredient which may be used fragrance compounds according to legal and IFRA guidelines.

Recommended restrictions For Manufacturing Use Only

Company

Vigon International, LLC
127 Airport Road
E. Stroudsburg, PA 18301
For information call: 570-476-6300
Web Site: www.vigon.com

24 Hour Emergency Response Information

INFOTRAC (ACCT# 78928);
1-800-535-5053 WITHIN THE U.S.A.
1-352-323-3500 OUTSIDE THE U.S.A.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name	Vigon International, LLC	
Address	127 Airport Road E. Stroudsburg, PA 18301 United States	
Telephone	For information call:	570-476-6300
Website	www.vigon.com	
E-mail	regulatory@vigon.com	
Emergency phone number	INFOTRAC 1-800-535-5053 1-352-323-3500	(ACCT# 78928); WITHIN THE U.S.A. OUTSIDE THE U.S.A.

2. HAZARD(S) IDENTIFICATION

Physical hazards	Flammable liquids	Category 3
Health hazards	Acute toxicity, oral	Category 5
	Acute toxicity, dermal	Category 5
	Skin corrosion/irritation	Category 2
	Sensitization, skin	Category 1
	Aspiration hazard	Category 1
Environmental hazards	Hazardous to the aquatic environment, long-term hazard	Category 2

Label elements

Signal word	Danger
Hazard statement	Flammable liquid and vapor. May be harmful if swallowed or in contact with skin. May be fatal if swallowed and enters airways. Causes skin irritation. May cause an allergic skin reaction. Toxic to aquatic life with long lasting effects.
Precautionary statement	
Prevention	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Keep cool. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Avoid breathing mist/vapors. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves.
Response	IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. IF ON SKIN: Call a POISON CENTER or doctor/physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to extinguish. Collect spillage.
Storage	Store in a well-ventilated place. Keep cool. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	78.9% of the mixture consists of component(s) of unknown acute oral toxicity. 93.15% of the mixture consists of component(s) of unknown acute dermal toxicity. 98.65% of the mixture consists of component(s) of unknown acute inhalation toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Chemical name	Common name and synonyms	CAS number	%
PINENE BETA	7,7-dimethyl-4-methylidenebicyclo[3.1.1] heptane (1)-6,6- dimethyl-2-methylene bicyclo(3.1.1) heptane	127-91-3	10 - < 15
CITRONELLOL	3,7-DIMETHYL-6-OCTEN-1-OL 6-Octen-1-ol, 3,7-dimethyl- 2,6- dimethyl-2-octen-8-ol	106-22-9	2.5 - < 5
2,4-DIMETHYLCYCLOHEX-3-ENE-1-CARBALDEHYDE	4-formyl-1,3-dimethylcyclohex-1-ene 2,4-DIMETHYL-3-CYCLOHEXEN-1-CARBOXALDEHYDE 3-Cyclohexene-1-carboxaldehyde, 2,4-dimethyl- DIMETHYLCYCLOHEX-3-ENE-1-CARBALDEHYDE (MIXED ISOMERS)	68039-49-6	1 - < 2.5
TRIMETHYL PENTYL CYCLOPENTANONE	2,2,5- trimethyl-5-pentylcyclopentan-1-one 2- pentyl-2,5,5-trimethylcyclopentanone Cyclopentanone, 2,2,5-trimethyl-5-pentyl-	65443-14-3	1 - < 2.5

Chemical name	Common name and synonyms	CAS number	%
PINENE ALPHA	dextro,laevo-pin-2(3)-ene 2,6,6 - trimethyl bicyclo-3,1,1-2-heptene 4,7,7- trimethylbicyclo[3.1.1]hept-3-ene	80-56-8	0.5< 1
4- penten-1-one, 1-(5,5-dimethyl-1-cyclohexen-1-yl)	1-(5,5-DIMETHYL-1-CYCLOHEXEN-1-YL) -4-PENTEN-1-ONE dimethyl cyclohexenyl 3-butenyl ketone	56973-85-4	0.1< 0.5
tetrahydro-4-methyl-2-(2-methyl propen-1-yl) pyran	2H-Pyran, tetrahydro-4-methyl-2-(2-methyl-1-propen-1-yl)- 2-ISO BUTENYL-4-METHYL TETRAHYDRO PYRAN 4-methyl-2-(2-methylprop-1-enyl)oxane	16409-43-1	0.1< 0.5
Other components below reportable levels			70 - < 80

4. FIRST-AID MEASURES

Inhalation If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. For breathing difficulties, oxygen may be necessary. Call a physician if symptoms develop or persist.

Skin contact Take off immediately all contaminated clothing. Get medical attention if irritation develops and persists. Wash skin thoroughly with soap and water for several minutes.

Eye contact Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists. Promptly wash eyes with plenty of water while lifting the eye lids.

Ingestion Call a physician or poison control center immediately. If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs.

Most important symptoms/effects, acute and delayed Aspiration may cause pulmonary edema and pneumonitis. Direct contact with eyes may cause temporary irritation. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

Indication of immediate medical attention and special treatment needed Not available.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media Water spray, fog, CO2, dry chemical, or alcohol resistant foam.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical Fire may produce irritating, corrosive and/or toxic gases.

Special protective equipment and precautions for firefighters Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection. Wear self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode when fighting fires.

Fire fighting equipment/instructions In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Water runoff can cause environmental damage. Ventilate closed spaces before entering them. Keep run-off water out of sewers and water sources. Dike for water control.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards Static charges generated by emptying package in or near flammable vapor may cause flash fire.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Eliminate all sources of ignition. Avoid contact with skin or inhalation of spillage, dust or vapor. Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them.

Methods and materials for containment and cleaning up Collect and dispose of spillage as indicated in section 13 of the SDS.

Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps. Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area).

Never return spills in original containers for re-use. This material and its container must be disposed of as hazardous waste. Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions Retain and dispose of contaminated wash water. Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water.

7. HANDLING AND STORAGE

Precautions for safe handling Do not handle or store near an open flame, heat or other sources of ignition. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value
PINENE ALPHA (CAS 80-56-8)	TWA	20 ppm
PINENE BETA (CAS 127-91-3)	TWA	20 ppm

Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Use explosion-proof ventilation equipment to stay below exposure limits. Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection	Avoid contact with eyes.
Skin protection	
Hand protection	Chemical resistant gloves.
Other	Use of an impervious apron is recommended. Chemical resistant gloves.
Respiratory protection	Chemical respirator with organic vapor cartridge and full facepiece.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	When using do not smoke. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Refer to Spec Sheet
Physical state	Liquid.
Form	Liquid.
Color	Refer to Spec Sheet
Odor	Characteristic.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	122.0 °F (50.0 °C) Closed Cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.

Upper/lower flammability or explosive limits

Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	0.4 mm Hg at 20 °C
Vapor density	Not available.
Relative density	1.01 at d 20/20

Solubility(ies)

Solubility (water)	Insoluble

Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Molecular formula	Not applicable
Oxidizing properties	Not oxidizing.
Specific gravity	1.01 at 25 °C
VOC	17 %

10. STABILITY AND REACTIVITY

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products if stored and handled as indicated.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	May be harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	May be harmful if swallowed. Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.
Symptoms related to the physical, chemical and toxicological characteristics	Aspiration may cause pulmonary edema and pneumonitis. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects

Acute toxicity	May be fatal if swallowed and enters airways. May be harmful in contact with skin.

Components	**Species**	**Test Results**
2,4-DIMETHYLCYCLOHEX-3-ENE-1-CARBALDEHYDE (CAS 68039-49-6)		
Acute		
Oral		
LD50	Rat	3900 mg/kg

Components	Species	Test Results
4- penten-1-one, 1-(5,5-dimethyl-1-cyclohexen-1-yl) (CAS 56973-85-4)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	> 2000 mg/kg
CITRONELLOL (CAS 106-22-9)		
Acute		
Dermal		
LD50	Rabbit	2650 mg/kg
Oral		
LD50	Rat	3450 mg/kg
PINENE ALPHA (CAS 80-56-8)		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg
tetrahydro-4-methyl-2-(2-methyl propen-1-yl) pyran (CAS 16409-43-1)		
Acute		
Oral		
LD50	Rat	4300 mg/kg
TRIMETHYL PENTYL CYCLOPENTANONE (CAS 65443-14-3)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg (OECD 402 limit)
Oral		
LD50	Rat	6834 mg/kg (OECD 401)

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

ACGIH sensitization

Turpentine and selected monoterpenes (CAS 127-91-3)	Dermal sensitization
Turpentine and selected monoterpenes (CAS 80-56-8)	Dermal sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	May be fatal if swallowed and enters airways.
Chronic effects	Prolonged inhalation may be harmful.
Further information	This mixture has not been subjected to toxicological testing as an entity. According to available data on the constituents the health classification criteria are met.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects.
This mixture has not been tested to ecotoxicological testing as an entity. According to available data on the constituents the environmental classification criteria are not met.

Product		Species	Test Results
CASSIS BASE 345 B			
Aquatic			
Fish	LC50	Fish	37.3333 mg/l, 96 hours Calculated
Components		**Species**	**Test Results**
2,4-DIMETHYLCYCLOHEX-3-ENE-1-CARBALDEHYDE (CAS 68039-49-6)			
Aquatic			
Acute			
Algae	EC50	Green algae (Desmodesmus subspicatus)	31 mg/l, 72 hours (based on growth rate - nominal concentration - OECD 201)
Crustacea	EC50	Daphnia magna	22.4 mg/l, 48 hours (measured concentration - similar to OECD 202)
Fish	LC50	Oncorhynchus mykiss (reported as Salmo gairdneri)	7.5 mg/l, 96 hours (measured concentration - OECD 203)
CITRONELLOL (CAS 106-22-9)			
Aquatic			
Acute			
Algae	EC50	Algae	2.4 mg/l, 72 hours
Crustacea	EC50	Daphnia	17 mg/l, 48 hours
Fish	LC50	Leuciscus idus (Golden orfe)	> 10 - < 22 mg/l, 96 hours

Components		Species	Test Results
PINENE ALPHA (CAS 80-56-8)			
Aquatic			
Crustacea	LC50	Daphnia magna	41 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	0.28 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

PINENE ALPHA	4.83
PINENE BETA	4.16

Mobility in soil No data available.

Other adverse effects The product contains volatile organic compounds which have a photochemical ozone creation potential.

13. DISPOSAL CONSIDERATIONS

Disposal instructions Do not discharge into drains, water courses or onto the ground. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code Not established.

Waste from residues / unused products Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

ADN

UN number	1197
UN proper shipping name	EXTRACTS, LIQUID (PINENE BETA)
Transport hazard class(es)	3
Subsidiary class(es)	-
Packing group	III
Environmental hazards	Yes
Labels required	3

ADR

UN number	1197
UN proper shipping name	EXTRACTS, LIQUID (PINENE BETA)
Transport hazard class(es)	3
Subsidiary class(es)	-
Packing group	III
Environmental hazards	Yes
Labels required	3

RID

UN number	1197
UN proper shipping name	EXTRACTS, LIQUID (PINENE BETA)
Transport hazard class(es)	3
Subsidiary class(es)	-
Packing Group	III
Environmental Hazards	Yes
Labels required	3
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

DOT

BULK

UN number	1169
Proper shipping name	EXTRACTS, AROMATIC, LIQUID (PINENE BETA)
Hazard class	3
Packing group	III
Environmental hazards	
Marine pollutant	Yes
Labels required	3

DOT

NON-BULK

Not regulated as dangerous goods.

IATA

UN number	1197
UN proper shipping name	EXTRACTS, LIQUID
Transport hazard class(es)	3
Subsidiary class(es)	-
Packing group	III
Environmental hazards	No
Labels required	3

IMDG

UN number	1197
UN proper shipping name	EXTRACTS, LIQUID (PINENE BETA)
Transport hazard class(es)	3
Subsidiary class(es)	-
Packing group	III
Environmental hazards	
Marine pollutant	Yes
Labels required	3
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

ADN; ADR; DOT BULK; IATA; IMDG; RID

Marine pollutant

15. REGULATORY INFORMATION

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

Classified hazard categories
Flammable (gases, aerosols, liquids, or solids)
Skin corrosion or irritation
Respiratory or skin sensitization
Reproductive toxicity
Aspiration hazard

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Issue date 11-24-2015

Revision date 01-27-2023

Version # 05

HMIS® ratings Health: 2*
Flammability: 2
Physical hazard: 0

List of abbreviations ACGIH: American Conference of Governmental Industrial Hygienists.
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS: Chemical Abstract Service.
IARC: International Agency for Research on Cancer.
IATA: International Air Transport Association.
IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.
IMDG: International Maritime Dangerous Goods.
MARPOL: International Convention for the Prevention of Pollution from Ships.
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.
STEL: Short term exposure limit.
TWA: Time Weighted Average.

Disclaimer

Vigon International, LLC cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available. The above information relates only to this product and not to its use in combination with any other material or any particular process and is designed only as guidance for the safe handling, use, processing, storage, transportation, and disposal and should not be considered as a guarantee or quality specification. This product has not been evaluated for safe use in e-cigarettes or any vaping application where the product(s) is/are intentionally vaporized and inhaled. Vigon International, Inc. has performed no testing on these products in e-cig/vaping applications. It is the sole responsibility of the individual(s) purchasing this product to assess its' safety in the final application. The above information relates only to this product and not to its use in combination with any other material or any particular process and is designed only as guidance for the safe handling, use, processing, storage, transportation, disposal, and should not be considered as a guarantee or quality specification. The above information is based on data provided by and collected from recognized sources such as distributors, manufacturers, and technical groups and is considered to be accurate to the best of Vigon's knowledge as of the date of this document. It is the responsibility of the user to review all safety information about this product and determine its safety and suitability in their own processes and operations. Appropriate warnings and safe handling procedures should be provided to all handlers and users, taking into account the intended use and the specific conditions and factors relating to such use in accordance with all applicable laws and regulations.

Revision information

This document has undergone significant changes and should be reviewed in its entirety.