

## 500732 HEXYL ISOBUTYRATE

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1. IDENTIFICATION		
Product Description:		
CAS #	2349-07-7	
FEMA Number	3172	
Other means of identification Vigon Item #	500732	
Recommended use	Concentrated aromatic and flavor ingredient which may be used in flavor and fragrance compounds according to legal and IFRA or FEMA GRAS/FDA guidelines.	
Recommended restrictions	For Manufacturing Use On	ly
<u>Company</u>		24 Hour Emergency Response Information
Vigon International, Inc.		INFOTRAC (ACCT# 78928);
127 Airport Road		1-800-535-5053 WITHIN THE U.S.A.
E. Stroudsburg, PA 18301		1-352-323-3500 OUTSIDE THE U.S.A.
For information call: 570-476-6300	)	
Web Site: www.vigon.com		
Manufacturer/Importer/Supplier/Di	stributor information	
Manufacturer		
Company name Address	Vigon International, Inc. 127 Airport Road E. Stroudsburg, PA 18301 United States	
Telephone	For information call:	570-476-6300
Website	www.vigon.com	
E-mail	Not available.	
Emergency phone number	INFOTRAC	(ACCT# 78928);
	1-800-535-5053	WITHIN THE U.S.A.
	1-352-323-3500	OUTSIDE THE U.S.A.
2. HAZARD(S) IDENTIFICA	TION	
Physical hazards	Flammable liquids	Category 4
Health hazards	Not classified.	
Environmental hazards	Not classified.	
Label elements		
Hazard symbol	None.	
Signal word	Warning	
Hazard statement	Combustible liquid.	
Precautionary statement		
Prevention	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear protective gloves/protective clothing/eye protection/face protection.	
Response	In case of fire: Use appropriate media to extinguish.	
Storage	Store in a well-ventilated place.	



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Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	100% of the mixture consists of component(s) of unknown acute inhalation toxicity. 100% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 100% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

#### **3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substances

Chemical name	Common name and synonyms	CAS number	%
HEXYL ISOBUTYRATE	N-hexyl isobutanoate	2349-07-7	100
	hexyl isobutanoate		
	hexyl 2-methyl propanoate		

#### **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	Direct contact with eyes may cause temporary irritation.
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

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.



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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 water spray to cool unopened containers.	

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

#### 6. ACCIDENTAL RELEASE MEASURES

General fire hazards

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Avoid contact with skin or inhalation of spillage, dust or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Eliminate all sources of ignition.	
Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). 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.	
	The product is immiscible with water and will spread on the water surface.	
	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. Prevent product from entering drains. 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.	
	Never return spills in original containers for re-use. This material and its container must be disposed of as hazardous waste. Collect and dispose of spillage as indicated in section 13 of the SDS.	
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid release to the environment. Retain and dispose of contaminated wash water. Contact local authorities in case of spillage to drain/aquatic environment.	
7. HANDLING AND STORA	AGE	
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,	Keep container closed. Handle containers with care. Open slowly in order to control possible	

## including any incompatibilities pressure release. Store in a cool, well-ventilated area. 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# Occupational exposure limitsThis substance has no PEL, TLV, or other recommended exposure limit.Biological limit valuesNo biological exposure limits noted for the ingredient(s).Appropriate engineering controlsUse explosion-proof ventilation equipment to stay below exposure limits. Adequate ventilation should be provided so that exposure limits are not exceeded.



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#### Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin protection Hand protection	Chemical resistant gloves.
Other	Not available.
Respiratory protection	Respiratory protection not required. If ventilation is insufficient, suitable respiratory protection must be provided.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	When using do not smoke. 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.

#### 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.
рН	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling	390.2 °F (199 °C)
range	
Flash point	157.0 °F (69.4 °C) Closed Cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explos	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	0.41 mm Hg at 25 °C
Vapor density	6
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Insoluble
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.



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Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Flammability class	Combustible IIIA estimated
Molecular formula	C10H20O2
Molecular weight	172.27 g/mol
Oxidizing properties	Not oxidizing.
Specific gravity	0.86 at 25 °C

#### **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 exp	osure	
Inhalation	No adverse effects due to inhalation are expected.	
Skin contact	Causes mild skin irritation.	
Eye contact	Causes mild eye irritation.	
Ingestion	Expected to be a low ingestion hazard.	
Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation	on.
Information on toxicological effects	3	
	<b>N 1</b>	
Acute toxicity	Not known.	
Acute toxicity Product	Not known. Species	Test Results
-	Species	Test Results
Product	Species	Test Results
Product HEXYL ISOBUTYRATE (CAS 234	Species	Test Results
Product HEXYL ISOBUTYRATE (CAS 234 Acute	Species	Test Results > 5000 mg/kg
Product HEXYL ISOBUTYRATE (CAS 234 Acute Dermal	<b>Species</b> 9-07-7)	
Product HEXYL ISOBUTYRATE (CAS 234 Acute Dermal LD50	<b>Species</b> 9-07-7)	



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Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.
Respiratory or skin sensitization	
Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	This product is not expected to cause skin sensitization.
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.	
	ed Substances (29 CFR 1910.1001-1052)
Not regulated.	
	ogram (NTP) Report on Carcinogens
Not listed.	ulated Substances (29 CFR 1910.1001-1050)
Not available.	
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	Not an aspiration hazard.
12. ECOLOGICAL INFOR	MATION
Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	No data is available on the degradability of this substance.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.
13. DISPOSAL CONSIDE	RATIONS
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).



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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

Not regulated as dangerous goods.

#### ADR

Not regulated as dangerous goods.

#### RID

Not regulated as dangerous goods.

#### DOT

#### BULK

UN number	NA1993
Proper shipping name	COMBUSTIBLE LIQUID, N.O.S. (HEXYL ISOBUTYRATE)
Hazard class	Combustible liq
Packing group	III
Environmental hazards	
Marine pollutant	No
Packaging exceptions	150
Packaging bulk	242
Labels required	3
т	

#### DOT NON-BULK

Not regulated as dangerous goods.

#### IATA

Not regulated as dangerous goods.

#### IMDG

Not regulated as dangerous goods.

#### **15. REGULATORY INFORMATION**

US federal regulations

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

CERCLA Hazardous Substance List (40 CFR 302.4)	
Not listed.	
SARA 304 Emergency release notification	
Not regulated.	
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	
Not available.	
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)	
Not regulated.	
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)	
Not regulated.	



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Not lists -	bus substance	
Not listed.	Vac	
SARA 311/312 Hazardous chemical	Yes	
Classified hazard categories	Flammable (gases, aerosols, liquids, or solids)	
SARA 313 (TRI reporting) Not regulated.		
Other federal regulations		
Clean Air Act (CAA) Section 1	12 Hazardous Air Pollutants (HAPs) List	
Not regulated. Clean Air Act (CAA) Section 1	12(r) Accidental Release Prevention (40 CFR 68.130)	
Not regulated.	(),	
Safe Drinking Water Act (SDWA)	Not regulated.	
US state regulations California Proposition 65		
California Proposition 65	- Carcinogens & Reproductive Toxicity (CRT): Listed substance	
Not listed.		
International Inventories		
Country(s) or region	Inventory name	On inventory (yes/no)
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
	Non-Domestic Substances List (NDSL)	No
Canada	NON-DOMESTIC Substances List (NDSL)	
Canada China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
		Yes Yes
China	Inventory of Existing Chemical Substances in China (IECSC) European Inventory of Existing Commercial Chemical	Yes
China Europe	Inventory of Existing Chemical Substances in China (IECSC) European Inventory of Existing Commercial Chemical Substances (EINECS)	
China Europe Europe	Inventory of Existing Chemical Substances in China (IECSC) European Inventory of Existing Commercial Chemical Substances (EINECS) European List of Notified Chemical Substances (ELINCS)	Yes
China Europe Europe Japan	Inventory of Existing Chemical Substances in China (IECSC) European Inventory of Existing Commercial Chemical Substances (EINECS) European List of Notified Chemical Substances (ELINCS) Inventory of Existing and New Chemical Substances (ENCS)	Yes No Yes
China Europe Europe Japan Korea	Inventory of Existing Chemical Substances in China (IECSC) European Inventory of Existing Commercial Chemical Substances (EINECS) European List of Notified Chemical Substances (ELINCS) Inventory of Existing and New Chemical Substances (ENCS) Existing Chemicals List (ECL)	Yes No Yes Yes Yes
China Europe Europe Japan Korea New Zealand	Inventory of Existing Chemical Substances in China (IECSC) European Inventory of Existing Commercial Chemical Substances (EINECS) European List of Notified Chemical Substances (ELINCS) Inventory of Existing and New Chemical Substances (ENCS) Existing Chemicals List (ECL) New Zealand Inventory Philippine Inventory of Chemicals and Chemical Substances	Yes No Yes Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

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



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Revision Date: 01-11-2018 Page 9 of 9 Version # 02 Print Date: 01-11-2018 **Revision date** 01-11-2018 Version # 02 **HMIS®** ratings Health: 1 Flammability: 2 Physical hazard: 0 Disclaimer Vigon International, Inc. 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 guality 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.