Hexyl Acetate Natural

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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

1.1. Product identifier

Product form	:	Substance
Trade name	:	Hexyl Acetate Natural
CAS No	:	142-92-7
Product code	:	H1800
Formula	:	C8H16O2
Synonyms	:	1-hexyl acetate / acetic acid hexyl ester / acetic acid, hexyl ester / Esters, n.o.s. / fema number 2565 / hexyl acetate(=normal-hexyl acetate) / hexyl alcohol acetate / hexyl ethanoate / hexyleacetate(=normal-hexyl acetate) / methylamyl acetate / n-hexyl acetate / normal-hexyl acetate
BIG no	:	10154

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture	:	Solvent

1.3. Details of the supplier of the safety data sheet

CHEMTEX USA
27-29 Dwight Place
Fairfield, 07004 - USA
T 862-702-8900 - F 862-702-8180
contact@chemtexusa.com - www.chemtexusa.com

1.4. Emergency telephone number

Emergency number	:	CHEMTEL:(800)255-3924

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Flam. Liq. 3 H226
Aquatic Acute 2 H401

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :

GHS02

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) :
H226 - Flammable liquid and vapor
H401 - Toxic to aquatic life

Precautionary statements (GHS-US) :
P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical, lighting, ventilating equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P273 - Avoid release to the environment
P280 - Wear eye protection, face protection, protective clothing, protective gloves
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P370+P378 - In case of fire: Use alcohol resistant foam, dry sand to extinguish
P403+P235 - Store in a well-ventilated place. Keep cool
P501 - Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Name	Product identifier	%	Classification (GHS-US)
Hexyl Acetate (Main constituent)	(CAS No) 142-92-7	100	Flam. Liq. 3, H226 Aquatic Acute 2, H401

Full text of H-phrases: see section 16

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service. Assure fresh air breathing. Allow the victim to rest.

First-aid measures after skin contact : Wash immediately with lots of water. Soap may be used. Do not apply (chemical) neutralizing agents. Take victim to a doctor if irritation persists. Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

First-aid measures after eye contact : Rinse immediately with plenty of water. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

First-aid measures after ingestion : Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Call Poison Information Centre (www.big.be/antigif.htm). Consult a doctor/medical service if you feel unwell. Ingestion of large quantities: immediately to hospital. Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/injuries after inhalation : EXPOSURE TO HIGH CONCENTRATIONS: Headache. Narcosis.

Symptoms/injuries after skin contact : ON CONTINUOUS EXPOSURE/CONTACT: Tingling/irritation of the skin.

Symptoms/injuries after eye contact : Slight irritation.

Symptoms/injuries after ingestion : Nausea. Vomiting.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Polyvalent foam. Alcohol-resistant foam. Polymer foam. BC powder. Carbon dioxide. Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Solid water jet ineffective as extinguishing medium. Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : DIRECT FIRE HAZARD. Flammable. Gas/vapour flammable with air within explosion limits. INDIRECT FIRE HAZARD. May be ignited by sparks. Flammable liquid and vapor.

Explosion hazard : DIRECT EXPLOSION HAZARD. Gas/vapour explosive with air within explosion limits. INDIRECT EXPLOSION HAZARD. may be ignited by sparks. May form flammable/explosive vapor-air mixture.

Reactivity : Upon combustion: CO and CO2 are formed. Reacts violently with (strong) oxidizers.

5.3. Advice for firefighters

Precautionary measures fire	:	Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: seal off low-lying areas. Exposure to fire/heat: have neighbourhood close doors and windows.
Firefighting instructions	:	Cool tanks/drums with water spray/remove them into safety. Take account of environmentally hazardous firefighting water. Use water moderately and if possible collect or contain it. Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.
Protection during firefighting	:	Heat/fire exposure: compressed air/oxygen apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	:	Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.

6.1.1. For non-emergency personnel

Protective equipment	:	Gloves. Protective clothing. Large spills/in enclosed spaces: compressed air apparatus. See "Material-Handling" to select protective clothing.
Emergency procedures	:	Mark the danger area. Stop engines and no smoking. No naked flames or sparks. Spark- and explosionproof appliances and lighting equipment. Wash contaminated clothes. Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment	:	Equip cleanup crew with proper protection.
Emergency procedures	:	Ventilate area.

6.2. Environmental precautions

Prevent soil and water pollution. Prevent spreading in sewers. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment	:	Contain released substance, pump into suitable containers. Consult "Material-handling" to select material of containers. Plug the leak, cut off the supply. Dam up the liquid spill. Do not use compressed air for pumping over spills. Heating: dilute combustible gas/vapour with water curtain.
Methods for cleaning up	:	Damaged/cooled tanks must be emptied. Do not use compressed air for pumping over spills. Take up liquid spill into a non combustible material e.g.: sand/earth. Scoop absorbed substance into closing containers. See "Material-handling" for suitable container materials. Carefully collect the spill/leftovers. Take collected spill to manufacturer/competent authority. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	:	Handle empty containers with care because residual vapors are flammable.
Precautions for safe handling	:	Comply with the legal requirements. Clean contaminated clothing. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Do not use compressed air for pumping over. Use spark-/explosionproof appliances and lighting system. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Observe normal hygiene standards. Keep container tightly closed. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No naked lights. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	:	Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/… equipment.

Storage conditions	:	Keep only in the original container in a cool, well ventilated place away from : Keep container tightly closed.
Incompatible products	:	Strong bases. strong acids.
Incompatible materials	:	Sources of ignition. Direct sunlight. Heat sources.
Heat-ignition	:	KEEP SUBSTANCE AWAY FROM: heat sources. ignition sources.
Prohibitions on mixed storage	:	KEEP SUBSTANCE AWAY FROM: combustible materials. oxidizing agents. (strong) acids. (strong) bases.
Storage area	:	Ventilation at floor level. Fireproof storeroom. Provide for a tub to collect spills. Keep only in the original container. Meet the legal requirements.
Special rules on packaging	:	SPECIAL REQUIREMENTS: closing. clean. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.
Packaging materials	:	SUITABLE MATERIAL: steel. aluminium. iron. glass. MATERIAL TO AVOID: steel with plastic inner lining.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Hexyl Acetate Natural (142-92-7)	
ACGIH	Not applicable
OSHA	Not applicable

8.2. Exposure controls

Personal protective equipment	:	Avoid all unnecessary exposure.
Materials for protective clothing	:	GIVE EXCELLENT RESISTANCE: No data available. GIVE GOOD RESISTANCE: No data available. GIVE LESS RESISTANCE: No data available. GIVE POOR RESISTANCE: No data available.
Hand protection	:	Gloves. Wear protective gloves.
Eye protection	:	Face shield. Chemical goggles or safety glasses.
Skin and body protection	:	Protective clothing.
Respiratory protection	:	Gas mask with filter type A. High vapour/gas concentration: self-contained respirator. Wear approved mask.
Other information	:	When using, do not eat, drink or smoke.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Liquid.
Color	:	Colourless to light yellow
Odor	:	Sweet odour Fruity odour Floral odour
Odor threshold	:	No data available
pH	:	No data available
Melting point	:	-81 °C
Freezing point	:	No data available
Boiling point	:	168 °C
Flash point	:	55 °C
Relative evaporation rate (butyl acetate=1)	:	No data available
Flammability (solid, gas)	:	No data available
Explosion limits	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available
Vapor pressure	:	1.2 hPa
Relative density	:	0.88
Relative vapor density at 20 °C	:	4.97

Specific gravity / density	:	878 kg/m³
Molecular mass	:	144.21 g/mol
Solubility	:	Insoluble in water. Soluble in ethanol. Soluble in ether. Soluble in oils/fats. Water: 0.05 g/100ml
Log Pow	:	2.83
Log Kow	:	No data available
Auto-ignition temperature	:	141 °C
Decomposition temperature	:	No data available
Viscosity	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available

9.2. Other information

Saturation concentration	:	7.09 g/m³
VOC content	:	100 %
Other properties	:	Gas/vapour heavier than air at 20°C. Slightly volatile.

SECTION 10: Stability and reactivity

10.1. Reactivity

Upon combustion: CO and CO2 are formed. Reacts violently with (strong) oxidizers.

10.2. Chemical stability

Stable under normal conditions. Flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.

10.5. Incompatible materials

strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Hexyl Acetate Natural (142-92-7)	
LD50 oral rat	36230 mg/kg (Rat)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)
ATE US (oral)	36230.000 mg/kg body weight

Skin corrosion/irritation	:	Not classified
Serious eye damage/irritation	:	Not classified
Respiratory or skin sensitization	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
Specific target organ toxicity (single exposure)	:	Not classified
Specific target organ toxicity (repeated exposure)	:	Not classified
Aspiration hazard	:	Not classified
Potential Adverse human health effects and symptoms	:	Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	:	EXPOSURE TO HIGH CONCENTRATIONS: Headache. Narcosis.
Symptoms/injuries after skin contact	:	ON CONTINUOUS EXPOSURE/CONTACT: Tingling/irritation of the skin.

Symptoms/injuries after eye contact : Slight irritation.

Symptoms/injuries after ingestion : Nausea. Vomiting.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Classification concerning the environment: not applicable.

Ecology - air : Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).

Ecology - water : Mild water pollutant (surface water). Fouling to shoreline. Ground water pollutant. Harmful to fishes. Toxic to invertebrates (Daphnia). Harmful to algae. Toxic to aquatic life.

Hexyl Acetate Natural (142-92-7)	
LC50 fish 1	11.9 mg/l (96 h; Pimephales promelas)
EC50 Daphnia 1	7.6 mg/l (48 h; Daphnia magna)

12.2. Persistence and degradability

Hexyl Acetate Natural (142-92-7)	
Persistence and degradability	Readily biodegradable in water. Not established.
ThOD	2.44 g O_2/g substance

12.3. Bioaccumulative potential

Hexyl Acetate Natural (142-92-7)	
Log Pow	2.83
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4). Not established.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Recycle by distillation. Incinerate under surveillance with energy recovery. Do not discharge unmonitored into the environment. Do not discharge into surface water. Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

Additional information : Hazardous waste according to Directive 2008/98/EC. Handle empty containers with care because residual vapors are flammable.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN3272 Esters, n.o.s., 3, III

UN-No.(DOT) : UN3272

Proper Shipping Name (DOT) : Esters, n.o.s.

Transport hazard class(es) (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Hazard labels (DOT)	:	3 - Flammable liquid

Packing group (DOT)	:	III - Minor Danger
DOT Packaging Non Bulk (49 CFR 173.xxx)	:	203
DOT Packaging Bulk (49 CFR 173.xxx)	:	242
DOT Special Provisions (49 CFR 172.102)	:	B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable. IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.
DOT Packaging Exceptions (49 CFR 173.xxx)	:	150
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	:	60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	:	220 L
DOT Vessel Stowage Location	:	A - The material may be stowed ‘‘on deck’’ or ‘‘under deck’’ on a cargo vessel and on a passenger vessel.

Additional information

Other information	:	No supplementary information available.

ADR

Transport document description	:	UN 3272 ESTERS, N.O.S., 3, III, (D/E)
Packing group (ADR)	:	III
Class (ADR)	:	3 - Flammable liquid
Hazard identification number (Kemler No.)	:	30
Classification code (ADR)	:	F1
Hazard labels (ADR)	:	3 - Flammable liquids

Orange plates	:	30 3272
Tunnel restriction code (ADR)	:	D/E
Limited quantities (ADR)	:	5l
Excepted quantities (ADR)	:	E1

Transport by sea

UN-No. (IMDG)	:	3272
Class (IMDG)	:	3 - Flammable liquids
EmS-No. (1)	:	F-E

MFAG-No : 127;128
EmS-No. (2) : S-D

Air transport

UN-No. (IATA) : 3272
Class (IATA) : 3 - Flammable Liquids
Packing group (IATA) : III - Minor Danger
Civil Aeronautics Law : Flammable liquids

SECTION 15: Regulatory information

15.1. US Federal regulations

Hexyl Acetate Natural (142-92-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA
No additional information available

EU-Regulations
No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Flam. Liq. 3 H226
Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]
R10
Full text of R-phrases: see section 16

National regulations
No additional information available

15.3. US State regulations

No additional information available

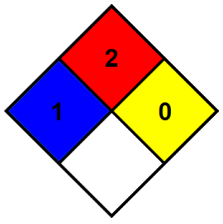
SECTION 16: Other information

Other information : None.

Full text of H-phrases:

Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Flam. Liq. 3	Flammable liquids Category 3
H226	Flammable liquid and vapor
H401	Toxic to aquatic life

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA fire hazard : 2 - Must be moderately heated or exposed to relatively high temperature before ignition can occur.
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



SDS US (GHS HazCom 2012)

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