

# **G.J. CHEMICAL COMPANY, INC. SAFETY DATA SHEET**

Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No. 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

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

### **1.1 PRODUCT IDENTIFIER: n-Propyl Acetate**

**CATALOG NUMBER(S): 209700**

**TRADE NAMES/SYNONYMS: Acetic Acid Propyl Ester, Propyl Ethanoate, 1-Propyl Acetate.**

**CAS NUMBER: 109-60-4**

**EC-No. 203-686-1**

**Index-No. 607-024-00-6**

**REACH Registration No. 01-2119484620-39-XXXX**

### **1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST**

#### **IDENTIFIED USES:**

**RECOMMENDED USE: Industrial: Manufacture of substances. Metal working fluids (rolling oils), Use as a processing aid, Use as an intermediate, Laboratory chemicals, Use in lubricants, Use in coatings (paints , inks, toners adhesives), Use in cleaning agents.**

**USES ADVISED AGAINST: No information available**

### **1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET**

**Company: G.J. CHEMICAL CO., INC.**

**Address: 40 VERONICA AVENUE  
SOMERSET, NJ 08873**

**Telephone: 1-973-589-1450**

**Fax: 1-973-589-3072**

### **1.4 Emergency Telephone Number**

**Emergency Phone: 1-800-424-9300 (CHEMTREC)**

**Timetable: Monday to Friday 8:00h to 17:00h**

## **2. HAZARDS IDENTIFICATION**

### **2.1 Classification of the substance or mixture**

**Classification according to the Regulation (EC) No. 1272/2008 (CLP)**

**General Hazards: This product is classified as hazardous according to current**

regulations.

**Physical Hazards:**

**Flammable liquids (Category 2), H225**

**Health Hazards:**

**Eye irritation (Category 2A), H319**

**Specific target organ toxicity - single exposure (Category 3) Central Nervous System, H336**

**Environmental Hazards:**

**Acute aquatic toxicity (Category 3), H402**

**Classification according to the Directive 67/548/EEC**

**Hazard Symbols:**

**F – Highly Flammable**

**Xi - Irritant**

**Risk Phrases:**

**R11 – Highly Flammable**

**R36 – Irritating to eyes.**

**R66 – Repeated exposure may cause skin dryness or cracking.**

**R67 –Vapors may cause drowsiness and dizziness**

**Safety Phrases:**

**S2- Keep out of the reach of children**

**S16- Keep away from sources of ignition - No smoking**

**S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice**

**S29- Do not empty into drains**

**S33 -Take precautionary measures against static discharges**

**2.2 LABEL ELEMENTS**

**n-Propyl Acetate 109-60-4**

**Labelling according to Regulation (EC) No. 1272/2008 (CLP)**



**Pictogram**

**GHS02**

**GHS07**

**Signal word:**

**DANGER**

**Hazard statement(s)**

H225 Highly flammable liquid and vapor.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.  
H402 Harmful to aquatic life.

**Precautionary statement(s)**

**Prevention:**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P233 Keep container tightly closed.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.  
P242 Use only non-sparking tools.  
P243 Take precautionary measures against static discharge.  
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.  
P264 Wash skin thoroughly after handling.  
P271 Use only outdoors or in a well-ventilated area.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337 + P313 If eye irritation persists: Get medical advice/ attention.  
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

**Storage:**

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
P403 + P235 Store in a well-ventilated place. Keep cool.  
P405 Store locked up.

**Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Other Hazards: Repeated exposure may cause skin dryness or cracking.

### **3. INGREDIENTS**

#### **3.1 SUBSTANCE:**

COMPONENT	CAS NO. CE Number	% BY WT. Range	Hazard Class and Hazard Statement Codes
n-Propyl Acetate	109-60-4 EC-No.203-686-1 Index-No.607-024-00-6 Reg.-No.01-2119484620-39-XXXX	99.5%min.	Flammable liquids (Category 2), H225 Eye irritation (Category 2A), H319 STOT-SE (Category 3), Central Nervous system, H336 Acute aquatic toxicity (Category 3),
H402 Non volatile residue:		0.001%max.	

3.2 MIXTURE: Not applicable

#### 4. FIRST-AID MEASURES

##### 4.1 DESCRIPTION OF FIRST AID MEASURES:

###### INHALATION: N-PROPYL ACETATE

**\*\*FIRST AID- Remove from exposure to fresh air, restore breathing use oxygen if needed. Keep warm and quiet. Immediately notify a physician.**

###### SKIN CONTACT: N-PROPYL ACETATE

**\*\*FIRST AID- Remove contaminated clothing and shoes immediately. Wash affected area with soap or mild detergent and large amounts of water until no evidence of chemical remains (approximately 15-20 minutes). Get medical attention immediately.**

###### EYE CONTACT: N-PROPYL ACETATE:

**\*\*FIRST AID- Wash eyes immediately with large amounts of water or normal saline, occasionally lifting upper and lower lids, until no evidence of chemical remains (approximately 15-20 minutes). Get medical attention immediately.**

###### INGESTION: N-PROPYL ACETATE:

**\*\*FIRST AID- Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Get medical attention immediately.**

#### **4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:**

**Inhalation:** Exposure to high concentrations has a narcotic effect when inhaled, production symptoms of drowsiness, headache, staggering and dizziness.

**Skin:** Contact with skin has a de-fatting action that can cause irritation. May cause irritation with a stinging effect and burning sensation. Substance may be dermally absorbed resulting in systemic toxicity as detailed in acute ingestion.

**Eye:** Splashes in eyes may cause severe irritation, possible corneal burns and eye damage.

**Ingestion:** May include nausea, headache and mental sluggishness and diarrhea may also result.

**Chronic Effects:** Repeated or prolonged exposure to skin may cause dermatitis. Prolonged or repeated exposure to vapors may cause conjunctivitis. Central nervous system depression.

**Medical Conditions Aggravated by Exposure:** May affect people with chronic diseases of the respiratory tract, skin, eyes, and central nervous system.

#### **4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:**

Specific details on antidote: No recommendation given.

### **5. FIRE FIGHTING PROCEDURES**

**FLASH POINT:** 20°C (68°F) (CC)

**UPPER EXPLOSIVE LIMIT:** 8.0%

**AUTOIGNITION TEMP.:** 450°C (842°F)

**LOWER EXPLOSIVE LIMIT:** 1.7%

**5.1 SUITABLE EXTINGUISHING MEDIA:** DRY CHEMICAL, CARBON DIOXIDE, WATER SPRAY OR ALCOHOL-RESISTANT FOAM. FOR LARGER FIRES, USE WATER SPRAY, FOG OR ALCOHOL-RESISTANT FOAM. ALCOHOL FOAM

Unsuitable extinguishing media: Do not use waterjet.

#### **5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:**

**FIRE AND EXPLOSION HAZARD:** DANGEROUS FIRE HAZARD WHEN EXPOSED TO HEAT OR FLAME. VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL A CONSIDERABLE DISTANCE TO A SOURCE OF IGNITION AND FLASH BACK. VAPOR-AIR MIXTURES ARE EXPLOSIVE.

Keep containers tightly closed. Flammable liquid; isolate from all sources of ignition. Closed containers may explode when exposed to extreme heat. Liquid floats on water.

**HAZARDOUS COMBUSTION PRODUCTS:** Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, carbon oxides and other unidentified organic compounds evolve when this material undergoes combustion.

**5.3 ADVICE FOR FIREFIGHTERS:** Shut off source. Keep unnecessary people away; isolate hazard area and deny entry. Avoid breathing vapors, stay upwind Do not spray pool fires directly. A solid stream of water or foam directed into hot burning liquid can cause frothing. Move container from fire area if you can do it without risk. Apply cooling water to sides of containers that are exposed to flames until well after fire is out. For massive fire in cargo area, use unmanned hose holder or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tank due to fire. Water fog may be used to cool closed containers to prevent pressure build up and possible auto ignition or explosion when exposed to extreme heat. Cool containers with water-fog from as far a distance as possible. Wear approved EN133 self-contained breathing apparatus for confined spaces. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents. If protective equipment is not available or not used, fight fire from a protected location or safe distance. Water may be ineffective.

## **6. ACCIDENTAL RELEASE MEASURES**

**6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:** Flammable Liquid; Eliminate ignition sources in the vicinity of the spill or released vapor. Immediately evacuate all nonessential people. Verify that responders are properly trained and wearing appropriate respiratory equipment and fire resistant protective clothing during cleanup operations.

### **6.2 ENVIRONMENTAL PRECAUTIONS:**

Keep out of drains, water sources and sewers. Do not flush into surface water or sanitary sewer system

### **6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:**

Methods for cleanup and containment:

Use explosion proof equipment. Shut off valves, contain spill, for small spills add non-flammable absorbent in spill area. For large spills use foam on spill to minimize vapors clean up by vacuuming then using non-flammable absorbent.

Methods for disposal:

Place all saturated absorbent, using non-sparking tools, in an approved container for disposal. Minimize breathing vapors and skin contact, ventilate confined areas, open all windows and doors, assure conformity with applicable

government regulations.

6.4 **REFERENCE TO OTHER SECTIONS:** See Sections 8 and 13.

## 7. **HANDLING AND STORAGE**

7.1 **PRECAUTIONS FOR SAFE HANDLING:** This material presents a fire hazard. Invisible vapor spreads easily and can be set on fire by many sources, such as pilot lights, welding equipment, and electrical motors and switches. Vapor is heavier than air and can travel considerable distance to a source of ignition and flash back. Avoid breathing vapors in top of shipping container. Use with adequate ventilation. Avoid prolonged or repeated contact with skin. Avoid contact with clothing. Do not take internally. Avoid work practices that may release volatile components in the atmosphere. Avoid contaminating soil or releasing material into sewage and drainage systems. Use non-sparking tools to open or close containers. Keep away from heat, sparks and flame. Keep container tightly closed and upright to prevent leakage. Use only with adequate ventilation. Wash thoroughly after handling. In case of small spill, absorb and flush with large volumes of water immediately.

Advice on general occupational hygiene:

Wash hands before breaks and after work. Keep away from food, drink and animal feeding stuffs. When using do not smoke.

**STATIC HAZARD:** Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not be sufficient.

### 7.2 **CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:**

Local fire authorities should be notified for storage of this material in any quantity. Local permits are required for storage in warehouse quantities. Recommended storage temperature: 15 - 25°C. Store large quantities only in cool, dry areas in buildings approved for chemical storage. Keep containers tight and upright to prevent leakage. Do not contact with oxidizing materials. Keep containers closed when not in use. Do not take internally.

Suitable material stainless steel, mild steel. Unsuitable material attacks some forms of plastic and rubber Temperature class T2. Storage class (TRGS 510):  
Flammable liquids

**CONTAINER WARNINGS:** Containers should be Bonded and Grounded when pouring. Avoid free fall of liquid in excess of a few inches. Empty containers release residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, or expose such containers to heat, sparks, static electricity or other sources of ignition. Do not attempt to clean. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum re-conditioner.

Since emptied containers retain product residues, assume emptied containers to have the same hazard qualities as full containers.

7.3 **SPECIFIC END USES:** Formulation; Distribution of substance; coatings; cleaning agent; Lubricants and lubricant additives; Metal working fluids / rolling oils laboratory chemicals.

## 8. EXPOSURE CONTROL (PERSONAL PROTECTION)

### 8.1 CONTROL PARAMETERS:

#### NATIONAL LIMIT VALUES

COMPONENT	CAS NO.	% BY WT.	EXPOSURE LIMITS	COUNTRY
n-Propyl Acetate EC-No.203-686-1 Index-No.607-024-00-6 Reg.-No.01-2119484620-39-XXXX	109-60-4	99.5%min.	200PPM TWA (ACGIH)	USA
			250PPM STEL (ACGIH)	USA
			200PPM TWA (NIOSH)	USA
			250PPM STEL (NIOSH)	USA
			200PPM TWA (OSHA)	USA
			100PPM TWA (MAK)	GERMANY
			420MG/M3 TWA (MAK)	GERMANY
			200ppm TWA (LT)	UK
			849MG/M3 TWA	UK
			250ppm STEL (ST)	UK
1060mg/m3 STEL (ST)	UK			

Other organic contaminants not tested for: 0.3%max.

Non volatile residue: 0.001%max.

STEL Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15- minute period unless otherwise specified TWA Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average

Keep personal exposure levels below Derived No Effect Level (DNEL) and national exposure limit values (if existing).

n-Propyl Acetate 109-60-4  
Derived No Effect Level (DNEL)

Application Area	Exposure Routes	Health effect	Value	unit
Workers	Inhalation	Acute systemic effects	840	mg/cm3
Workers	Inhalation	Acute local effects	420	mg/m3/day
Consumers	Inhalation	Acute local effects	298	mg/m3
Consumers	Inhalation	Acute systemic effects	149	mg/m3/day

n-Propyl Acetate 109-60-4  
Predicted No Effect Concentration (PNEC)

Environmental Compartment	PNEC Value
Soil	0.02 mg/kg dwt
Marine water	0.6 µg/l
Fresh water	0.06 mg/l
Marine water sediment	0.01 mg/kg dwt
Sewage Treatment	1 mg/l

Key: DNEL – Derived no effect level



DMEL – Derived Minimum effect level  
PNEC - Predicted No effect concentration.  
BW/d – Bodyweight/day

## 8.2 EXPOSURE CONTROLS

**EXPOSURE GUIDELINES:** Consider the potential hazards of this material (Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended.

**ENGINEERING CONTROLS:** Provide general dilution or local exhaust ventilation in volume and pattern to keep concentrations within permitted exposure limits. Explosion proof motors should be used in mechanical ventilation.

**PERSONAL PROTECTION EQUIPMENT:** Use personal protection equipment according to Directive 89/686/EEC

**RESPIRATORY PROTECTION:** The following respirators are recommended based on information found in the physical data, toxicity and health effects sections. They are ranked in order from minimum to maximum respiratory protection.

The specific respirator selected must be based on contamination levels found in the work place, must be based on the specific operation, must not exceed the working limits of the respirator and must be jointly approved by the National Institute for any chemical cartridge respirator with organic vapor cartridge(s) and a full face-piece.

For known vapor concentrations use a Valve filtering: EN405; or; Half mask: EN140; plus filter, EN 141 air purifying respirator with full face-piece and organic vapor cartridges. For known high concentrations, and confined areas, and/or where vapor concentrations are unknown use a European Standard EN 136 approved positive pressure full face-piece supplied air respirator.

1700 PPM- Any powered, air-purifying respirator with organic vapor cartridge(s).  
Any chemical cartridge respirator with a full face-piece and organic vapor cartridge(s).

10,000 PPM- Any supplied-air respirator operated in a continuous flow mode.

>10,000 PPM- Any air-purifying, full-face-piece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister.

Any self-contained breathing apparatus with a full face-piece.

Any supplied-air respirator with a full face-piece.

ESCAPE- Any air-purifying, full-face-piece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister.

Any appropriate escape-type, self-contained breathing apparatus.

**BODY CLOTHING:** Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged contact with this substance. Use chemical resistant apron or other impervious clothing. Flame retardant antistatic protective clothing. Remove and wash contaminated clothing

before reuse.

**SKIN PROTECTION:** Employee must wear appropriate protective gloves to prevent contact with this substance.

Splash contact

Material: butyl-rubber

Minimum layer thickness: 0.3 mm

Break through time: 110 min

**EYE/FACE PROTECTION:** Use safety eyewear with splash-guards or face shield. Contact lenses should not be worn.

Emergency shower and eyewash should be easily accessible to the work area.

**HYGIENE MEASURES:** Do not store, use and /or consume foods, beverages, tobacco products, cosmetics in areas where this material is stored.

Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.

**REFERENCE TO REGULATIONS:** Individual protection measures should satisfy the requirements specified in the Regulation of the Minister of Economy on basic requirements for personal protection controls, of 21 December 2005 (Journal of Laws No.259, item 2173).

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

### **9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:**

n-Propyl Acetate 109-60-4

Appearance-----> Clear liquid

Color-----> Colorless

Odor-----> Fruity odor

Odor Threshold-----> No data available

pH-----> 8.5 at 200 g/l at 20°C (68°F)

Molecular Weight-----> 102.13amu

Melting/Freezing Point-----> -95°C (-139°F)

Boiling Range -----> 102°C (216°F)

Specific Gravity-----> 0.888@25°C

Vapor Pressure-----> 25mmHg@20°C (68°F)

Vapor Density (air=1)-----> 3.53

Water Solubility-----> 2.3@20°C

Partition Coefficient n-Octanol/Water-> log Pow: 1.23

Evaporation Rate (Butyl Acetate=1)----> 2.2

Flash Point-----> 14°C (57°F) - closed cup

Upper Flammability Limit-----> 8% (V)

Lower Flammability Limit-----> 1.7% (V)

Auto-Ignition Temperature-----> 842°F (450°C)

Decomposition Temperature-----> No data available

Viscosity-----> 0.74 CPS @ 20°C

Explosive Properties-----> No data available

Oxidizing Properties-----> No data available

## 9.2 OTHER INFORMATION:

Surface tension-----> 24.3 mN/m at 20°C (68°F)

Solvent Solubility: Soluble in Alcohols, Ethers, Hydrocarbons; Slightly soluble in water.

## 10. STABILITY AND REACTIVITY INFORMATION

10.1 REACTIVITY: No data available.

10.2 CHEMICAL STABILITY: Unstable ( ) Stable (X)  
Stable under normal temperatures and pressures. May slowly per-oxidize on exposure to air under normal storage conditions

10.3 POSSIBILITY OF HAZARDOUS REACTIONS: Vapors may form explosive mixtures with air.

HAZARDOUS POLYMERIZATION: May occur ( ) Will not occur (X)

10.4 CONDITIONS TO AVOID: Heat, Sparks, Pilot Lights, Static Electricity, and Open Flame.

10.5 INCOMPATIBLE MATERIALS: Strong oxidants such as liquid chlorine, oxygen, sodium hypochlorite, inorganic acids e.g. nitric acid, perchloric acid; also hydrogen peroxide, chromium trioxide.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition products may include; Fumes, Smoke, Carbon Monoxide, Aldehydes and other decomposition products where combustion is not complete.

## 11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:

Routes of Entry: Inhalation--> x Skin--> x Ingestion--> x Eye--> x

**ACUTE HEALTH EFFECTS:**

Effects of overexposure:

**Inhalation:** Exposure to high concentrations has a narcotic effect when inhaled, production symptoms of drowsiness, headache, staggering and dizziness.

**Skin:** Contact with skin has a de-fatting action that can cause irritation. May cause irritation with a stinging effect and burning sensation. Substance may be dermally absorbed resulting in systemic toxicity as detailed in acute ingestion.

**Eye:** Splashes in eyes may cause severe irritation, possible corneal burns and eye damage.

**Ingestion:** May include nausea, headache and mental sluggishness and diarrhea may also result.

**Chronic Effects:** Repeated or prolonged exposure to skin may cause dermatitis. Prolonged or repeated exposure to vapors may cause conjunctivitis. Central nervous system depression.

**Medical Conditions Aggravated by Exposure:** May affect people with chronic diseases of the respiratory tract, skin, eyes, and central nervous system.

**ACUTE TOXICITY:**

The effects of overexposure shown in Section II are based on acute animal toxicity profiles. Typical values are:

Ingredient	Oral LD50 (Rat)	Skin LD50 (Rabbit)	Inhalation LC50
N-Propyl Acetate	9370mg/kg	17700mg/kg	32mg/L/4hr

**SKIN CORROSION/IRRITATION:** Skin - Rabbit Result: No skin irritation  
Based on available data, the classification criteria are not met.

**SERIOUS EYE DAMAGE/EYE IRRITATION:** Eyes - Rabbit Result: Moderate eye irritation. Based on available data, the classification criteria are not met.

**RESPIRATORY OR SKIN SENSITIZATION:**

Respiratory: Method: OECD 406: Guinea pig sensitization Result: non-sensitizing  
Skin: No data available

**MUTAGENIC EFFECTS:** No data available

**CARCINOGEN STATUS:** : IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**REPRODUCTIVE TOXICITY:** No data available

**Specific target organ toxicity (STOT-SE)- single exposure (Globally Harmonized System):** May cause drowsiness or dizziness.

Specific target organ toxicity (STOT-RE) - repeated exposure (Globally Harmonized System): no data available

ASPIRATION HAZARD: No data available

11.2 ADDITIONAL INFORMATION: Prolonged or repeated exposure can cause narcosis

RTECS# AJ3675000

## 12. ECOLOGICAL INFORMATION

### DANGEROUS TO AQUATIC LIFE IN HIGH CONCENTRATIONS

May be dangerous if it enters water intakes.

Notify local health and pollution control officials.

Notify operators of nearby water intakes.

#### 12.1 AQUATIC TOXICITY (Acute):

Toxicity to Fish:

LC50 Pimephales promelas (fathead minnow) - 56-64ppm – 96h

Toxicity to aquatic invertebrates:

EC50 Daphnia magna (Water flea) - 318ppm – 24h

Toxicity to algae:

EC50 (Pseudokirchneriella subcapitata (algae) - 672mg/L – 72h

#### 12.2 PERSISTANCE AND DEGRADABILITY:

Readily biodegradable

12.3 BIOACCUMULATIVE POTENTIAL: Does not bio-accumulate.

The log octanol/water partition coefficient is estimated to be 1.23

Biological Oxygen Demand (BOD): 62-80%, 5 days

Bio-concentration Factor (BCF): Estimated to range from: 2.5 to 5.1.

12.4 MOBILITY IN SOIL: No data available.

12.5 RESULTS OF PBT AND vPvB: This substance is not considered to be persistent, bio-accumulating nor toxic (PBT), nor very persistent nor very bio-accumulating (vPvB)

12.6 OTHER ADVERSE EFFECTS:

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.

### **13. DISPOSAL CONSIDERATIONS**

**13.1 WASTE TREATMENT METHODS:** Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly it is the responsibility of the user to determine the proper storage, transportation, treatment and or disposal methodologies for spent materials and residues at time of disposition. Dispose in accordance with all applicable disposal regulations. Incinerate under controlled conditions in a permitted facility.

**CONTAMINATED PACKAGING:** Dispose of as unused product

Waste disposal Law of 14 December 2012 (Journal of Laws 2013, item 21) with further amendments.

Product classified as hazardous waste - Yes  
Packaging classified as hazardous waste - Yes

Waste codes / waste designations according to EWC / AVV Waste from residues/unused products:

Waste codes should be assigned by the user based on the application for which the product was used

Further information: Provisions relating to waste: EC Directive 2006/12/EC; 2008/98/EEC.

### **14. TRANSPORT INFORMATION**

In accordance with ADR, RID, IMDG, ICAO/IATA  
Road - ADR

14.1 UN Number:-----> UN1276  
14.2 Proper Shipping Name-----> n-Propyl Acetate  
14.3 Hazard Class-----> 3 (Flammable Liquid)  
Classification Code-----> F1  
14.4 Package Code-----> II  
14.5 Environmental hazard-----> Not applicable  
14.6 Special precautions for user: None  
Tunnel restriction code-----> (D/E)  
Excepted quantities-----> E2  
Limited quantity (LQ)-----> 1 L  
ADR Hazard Id (Kemmler Number) 33  
Transport Category-----> 2

Rail - RID

14.1 UN Number:-----> UN1276  
14.2 Proper Shipping Name-----> n-Propyl Acetate

14.3 Hazard Class-----> 3 (Flammable Liquid)  
14.4 Package Code-----> II  
14.5 Environmental hazard-----> Not Applicable  
14.6 Special precautions for user:----> None

#### Sea Transport (IMDG)

14.1 UN Number:-----> UN1276  
14.2 Proper Shipping Name-----> n-PROPYL ACETATE  
14.3 Hazard Class:-----> 3 (Flammable Liquid)  
14.4 Packing Group:-----> II  
14.5 Environmental hazard-----> Not applicable  
14.6 Special precautions for user:----> None  
    EmS-No-----> F-E S-D  
    Excepted quantities-----> E2  
    Limited Quantity-----> 1L

#### Air Transport (ICAO/IATA)

14.1 UN Number:-----> UN1276  
14.2 Proper Shipping Name:-----> n-Propyl Acetate  
14.3 Hazard Class:-----> 3 (Flammable Liquid)  
14.4 Packing Group:-----> II  
14.5 Environmental hazard-----> Not applicable  
14.6 Special precautions for user:----> None  
    Excepted quantities-----> E2  
    Limited quantity (LQ)-----> 1 L  
    Packing instruction (cargo aircraft): 364  
    Packing instruction (passenger aircraft): 353

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code  
Product name: n-PROPYL ACETATE  
Pollution category: Y  
Ship type: 3

## 15. REGULATORY INFORMATION

### 15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE:

Substance is either included in EINECS, ELINCS, NLP inventories or exempt.

#### 15.1.1 EU Regulations:

Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008

**Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F**

**Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10**

**Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1**

**Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 5.1**

**Regulation 649/2012/EU concerning the export and import of hazardous chemicals. (PIC):**

**Not listed**

**Regulation 1005/2009/EC on substances that deplete the ozone layer. (ODS):**

**Not listed.**

**Regulation 1005/2004/EC on persistent organic pollutants. (POP):**

**Not listed**

**List of substances subject to authorization (REACH, Annex XIV)**

**Not listed**

**Seveso Directive 2012/18/EU (Seveso III)**

No	Hazard Categories	Qualifying quantity (tons)		Notes
		Lower Tier	Upper Tier	
P5c	Flammable liquids (cat. 2,3)	5000	50000	51

**Notation 51) Depending on conditions.**

**Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II**

**Not Listed.**

**Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)**

**Not Listed.**

**Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD)**

**Not Listed.**



**Directive 1999/13/EC (VOC Guideline) \*\*\***

<b>Component</b>	<b>Status</b>
n-Propyl Acetate CAS: 109-60-4	regulated***

**NATIONAL REGULATIONS****USA****TSCA (Toxic Substance Control Act)**

N-Propyl Acetate CAS-No. 109-60-4 is listed on the TSCA Inventory.

**International Inventories:**

<b>Country or Region</b>	<b>Inventory Name</b>	<b>On inventory yes/no</b>
<b><u>Australia</u></b>	Australian Inventory of Chemical Substances (AICS)	Yes
<b><u>Canada</u></b>	Domestic Substances List (DSL)	Yes
<b><u>Canada</u></b>	Non-Domestic Substances List (NDSL)	No
<b><u>China</u></b>	Inventory of Existing Chemical Substances in China (IECSC)	Yes
<b><u>Europe</u></b>	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
<b><u>Europe</u></b>	European List of Notified Chemical Substances (ELINCS)	No
<b><u>Japan</u></b>	Inventory of Existing and New Chemical Substances (ENCS)	Yes
<b><u>Japan</u></b>	Industrial Safety & Health Law Inventory (ISHL)	Yes
<b><u>Korea</u></b>	Existing Chemicals List (ECL)	Yes
<b><u>Mexico</u></b>	National Inventory of Chemical Substances (INSQ)	Yes
<b><u>New Zealand</u></b>	New Zealand Inventory	Yes
<b><u>Philippines</u></b>	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
<b><u>Switzerland</u></b>	Inventory of Notified New Substances (CHINV)	Yes
<b><u>Taiwan</u></b>	National Existing Chemical Inventory (NECI)	Yes
<b><u>United States &amp; Puerto Rico</u></b>	Toxic Substances Control Act Inventory	Yes

**15.2 CHEMICAL SAFETY ASSESSMENT: A chemical safety assessment has been carried out for this substance.**

**16. OTHER INFORMATION:****Hazard Symbols:**

**F – Highly Flammable**

**Xi - Irritant**

**Risk Phrases:**

**R11 - Highly flammable**

**R36 - Irritating to eyes**

**R66 - Repeated exposure may cause skin dryness or cracking**

**R67 –Vapors may cause drowsiness and dizziness**

**Safety Phrases:**

**S2- Keep out of the reach of children**

**S16- Keep away from sources of ignition - No smoking**

**S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice**

**S29- Do not empty into drains**

**S33 -Take precautionary measures against static discharges**

**Hazard statement(s) from Section 2 and 3:**

**H225 Highly flammable liquid and vapor.**

**H319 Causes serious eye irritation.**

**H336 May cause drowsiness or dizziness.**

**H402 Harmful to aquatic life.**

**Date of preparation-----> May 25, 2018**

**Revision Number-----> 1.2**

**Revision content-----> Updated Sections: 1, 3, 4, 7, 8, 10, 11, and 16.**

**Revision Date-----> April 15, 2019**

Key literature references and sources for data:

1. Council Directive 67/548/EEC of 27 June 1967 on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances.
2. Directive 1999/45/EC of the European Parliament and of the Council of 31 May 1999 concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations.
3. Regulation (EC) No. 1907/2006 of the European Parliament and the council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EC and 2000/21/EC.
4. Regulation (EC) No. 1272/2008 for the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006.
5. Occupational Exposure Limits by the INSHT (Spanish National Institute of Safety and Hygiene at Work).

**16.1. Abbreviation and acronyms (NOT ALL ARE USED IN THIS SDS)**

**AC Article category BSAF**

**Bio soil accumulation factor**

**BCF Bio concentration factor**

**CAS Chemical Abstracts Service**

**CLP Classification, labelling and packaging**

**CMR Carcinogenic, mutagenic or toxic for reproduction**

**CSA/CSR Chemical safety assessment / Chemical safety report**

**DNEL Derived no effect level**

**EC10** Concentration of a substance where 10% of the population is affected  
**EC50** Concentration of a substance where 50% of the population is affected  
**ECHA** European chemicals agency  
**EINECS** EU list of existing chemical substances  
**EmS** Emergency schedule  
**ERC** Environmental release category  
**ES** Exposure scenario  
**eSDS** Extended safety data sheet  
**GHS** Globally harmonized system  
**IATA-DGR** International air transport association - dangerous goods regulations  
**ICAO** Technical Instructions for the Safe Transport of Dangerous Goods by Air  
**IU** Identified use  
**IUPAC** International Union of Pure and Applied Chemistry  
**IBC code** International code for the construction and equipment of ships carrying dangerous chemicals in bulk  
**IMDG** International maritime dangerous goods  
**KP** Partition coefficient  
**LC10** Lethal concentration of a substance that can be expected to cause death in 10% of the population  
**LC50** Lethal concentration of a substance that can be expected to cause death in 50% of the population  
**LD50** Lethal dose of a substance that can be expected to cause death in 50% of the population  
**NO(A)EC** No observed (adverse) effect concentration  
**NO(A)EL** No observed (adverse) effect level  
**OECD** Organization for economic co-operation and development  
**OEL** Occupational exposure limit  
**PBT** Persistent, bioaccumulative, and toxic  
**PC** Product category  
**PNEC** Predicted no-effect concentration  
**PROC** Process category  
**REACH** Registration, evaluation, and restriction of chemicals (i.e. Regulation (EC) No. 1907/2006)  
**RID** International rule for transport of dangerous substances by railway  
**SDS** Safety data sheet  
**STOT** Specific target organ toxicant  
**STP** Sewage treatment plant  
**SU** Sector of end use  
**TWA** Time weighted average  
**TWA** Time weighted average  
**vPvB** Very persistent, very bioaccumulative

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