Issue date: 10/7/2003
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Safety Data Sheet

1. Chemical product and company identification

Product name : n-Propyl acetate

Company information

Name of manufacturer	:	KANTO CHEMICAL CO., INC.
Address	:	2-1, Nihonbashi, Muromachi 2-Chome, Chuo-Ku, Tokyo, 103-0022, JP
Name of section	:	Business Administration Department, Reagent Division
Telephone number	:	+81-3-6214-1090
Facsimile number	:	+81-3-3241-1047
Mail address	:	BC32@kanto.co.jp
Reference No	:	32432
Recommended use	:	For research use only
Restrictions on use	:	Seek expert judgment when using the product for applications other than those recommended.

2. Hazards identification

GHS classification

Physical hazards	Flammable liquids	Category 2
Health hazards	Acute toxicity (inhalation:vapors)	Category 4
	Serious eye damage/eye irritation	Category 2B
	Specific target organ toxicity (single exposure)	Category 3 (narcosis)
	Specific target organ toxicity (single exposure)	Category 3 (respiratory tract irritation.)
Environmental hazards	Aquatic acute	Category 3

Hazard pictograms



Signal word : Danger

Hazard statements :
Highly flammable liquid and vapor
Causes eye irritation
Harmful if inhaled
May cause respiratory irritation
May cause drowsiness or dizziness
Harmful to aquatic life

Precautionary statements

Prevention :
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep container tightly closed.
Ground and bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.

		Take action to prevent static discharges. Avoid breathing mist/vapors. Wash hands, forearms and face thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.
Response	:	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water . IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER or doctor if you feel unwell. If eye irritation persists: Get medical advice/attention.
Storage	:	Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.
Disposal	:	Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

3. Composition/information on ingredients

Distinction of substance or mixture : Substance

Chemical name	Concentration (%)	Formula	TSCA	EC-No.	CAS RN
n-Propyl acetate	≥ 98	C5H1002	Listed	203-686-1	109-60-4

4. First aid measures

First aid measures

First-aid measures after inhalation	:	Remove the victim to fresh air, and make him blow his nose and gargle. If necessary, get medical treatment.
First-aid measures after skin contact	:	Wash the affected areas under running water.
First-aid measures after eye contact	:	Wash the affected areas under running water for at least 15 minutes. If necessary, get medical treatment.
First-aid measures after ingestion	:	The chemical is volatile. Do not induce vomiting because it increases the risk of aspiration into the lungs. Get medical attention immediately. If necessary, rinse mouth with water.
Personal Protection in First Aid and Measures	:	Rescuers should wear proper protective equipment like rubber gloves, goggles.

5. Fire fighting measures

Suitable extinguishing media	:	Dry chemical, CO2, dry sand, or alcohol-resistant foam
Unsuitable extinguishing media	:	Water spray, Foam extinguisher
Firefighting instructions	:	Move containers from fire area if it can be done without risk, if not possible, apply water from a safe distance to cool and protect surrounding area.

		Fight fire from windward. Dry chemical powder, carbon dioxide or dry sand should be used for small fires. Alcohol-resistant foam extinguisher is effective for a large scale fire.
Personal protection (Emergency response)	:	Wear breathing apparatus.

6. Accidental release measures

Personal Precautions, Protective Equipment and Emergency Procedures

General measures	:	Wear proper protective equipment and avoid contact with skin and inhalation of vapor. Conduct operations from upwind and evacuate people downwind. Remove all sources of ignition. Keep away personnel except for authorized ones from spillage area by stretching ropes.

Environmental precautions

Environmental precautions	:	Attention should be given to avoid damage to the environment by flowing of spillage to rivers.

Methods and Equipment for Containment and Cleaning up

For containment	:	Absorb spill with inert material (e.g, diatomaceous earth, sand) and flush spillage area with copious amounts of water.
Prevention Measures for Secondary Accidents	:	Remove nearby sources of ignition and prepare extinguishing media.

7. Handling and storage

Handling

Technical measures	:	Wear proper protective equipment to avoid contact with skin or inhalation of vapor. Fire is strictly prohibited. Ventilate well at working places. Prevent build-up of electrostatic charges (e.g. by grounding).
Precautions for safe handling	:	Use with an enclosed system or a local exhaust ventilation. Handle in a well-ventilated place. When outdoors, work is done from the windward. Do not allow contact with oxidizing substances.

Storage

Storage conditions	:	Store in a dark, cool place and tightly closed.
Material used in packaging/containers	:	Glass. Do not use vinyl chloride resin, acrylic resin, polystyrene etc.

8. Exposure controls / Personal protection equipment

ACGIH TWA	100 ppm
ACGIH STEL	150 ppm

Appropriate engineering controls	:	Use with an enclosed system or a local exhaust ventilation.

Protective equipment

Respiratory protection	:	Chemical cartridge respirator with an organic vapor cartage or airline respirator
Hand protection	:	Impervious protective gloves

Eye protection	:	Safety goggles
Skin and body protection	:	Protective clothing, protective boots

9. Physical and chemical properties

Physical state	:	Liquid
Color	:	Colorless.
Odor	:	Fruit like
pH	:	No data available
Melting point	:	-92.5 ° C
Freezing point	:	No data available
Boiling point	:	101.55 ° C
Flash point	:	14.4 ° C (C.C.)
Auto-ignition temperature	:	450 ° C
Decomposition temperature	:	No data available
Flammability	:	Flammable
Vapor pressure	:	33 hPa (20℃)
Relative density	:	No data available
Density	:	0.889 g/cm^3 (20℃)
Relative gas density	:	3.52
Solubility	:	Organic solvents: Miscible with alcohol, diethyl ether, etc. Water: 2.3 % (25℃)
Partition coefficient n-octanol/water (log Pow)	:	1.24
Explosive limits (vol %)	:	1.8 - 8.0 vol %
Viscosity, kinematic	:	0.67 mm^2/s (20℃)
Particle characteristics	:	No data available

10. Stability and reactivity

Reactivity	:	May react with oxidizing substances.
Chemical stability	:	Stable under normal conditions. In the presence of water, it gradually hydrolyzes to produce acetic acid.
Possibility of hazardous reactions	:	Stable under normal conditions of use.
Conditions to avoid	:	Light, heat, moisture.
Incompatible materials	:	Oxidizing substances.
Hazardous decomposition products	:	Carbon monoxide.

11. Toxicological information

Acute toxicity (oral)	:	No classification rat LD50>3200mg/kg
Acute toxicity (dermal)	:	No classification rabbit LD50>17800mg/kg
Acute toxicity (inhalation)	:	No classification (gas) Harmful if inhaled (vapor) rat LC50=4000-8000ppm/4h Classification not possible (dust, mist)

Skin corrosion/irritation	:	Classification not possible There are 2 reports of non-occlusive application of this substance to rabbits for 24 hours, in which although irritation was not observed in one test, erythema and necrosis were observed in the other study. In addition, there are reports that slight irritation was observed after application to abraded skin in another test with rats, and that after occlusive application of this substance to the skin of guinea pigs, slight erythema was observed but it was reversible. From the above, since there was no report on 4-hour application and the degrees of irritation of obtained information varied, all of them were considered inadequate to determine the category.
Serious eye damage/irritation	:	Causes eye irritation It is reported that in a test with rabbits, since reversible cornea damage was observed, and the degree of irritation was Grade 2 (1-10), it was slightly irritating. In addition, irritation to the eyes was also reported in cases in humans. From the above results, it was classified into category 2B.
Respiratory sensitization	:	Classification not possible
Skin sensitization	:	Classification not possible
Germ cell mutagenicity	:	Classification not possible There were no in vivo data. As for in vitro, it was negative in a bacterial reverse mutation test.
Carcinogenicity	:	Classification not possible
Reproductive toxicity	:	Classification not possible
STOT-single exposure	:	May cause drowsiness or dizziness May cause respiratory irritation This substance was irritating to the respiratory tract. In humans, there was a report of weakness, drowsiness and unconsciousness at high concentrations. As for experimental animals, there is a description of narcotic effects, and there was a report of being inactive and central nervous system depression in an inhalation exposure to rats at 16.7 mg/L. From the above, this substance was considered to have respiratory tract irritation and narcotic effects, therefore, it was classified into category 3 (respiratory tract irritation, narcosis).
STOT-repeated exposure	:	Classification not possible Besides, although there were descriptions of an inhalation test with rats exposed to the vapour of n-propyl alcohol, a hydrolysate of this substance, and an inhalation test with cats exposed to this substance, the exposure periods were as short as 5 or 9 days, therefore, the data were not applicable for classification.
Aspiration hazard	:	Classification not possible

12. Ecological information

Ecotoxicity

Aquatic acute	:	Harmful to aquatic life Pimephales promelas LC50=60mg/L/96h
Aquatic chronic	:	No classification Pseudokirchneriella subcapitata NOEC=83.2mg/L/72h

Persistence and degradability

Readily biodegradable
BOD : 81%

Bioaccumulative potential

Low bioconcentration
BCF : 3

Mobility in soil

High mobility
Koc : 10

Hazardous to the ozone layer

Ozone : Classification not possible

13. Disposal considerations

Ecological waste information : Burn in a chemical incinerator equipped with an afterburner and a scrubber. Or entrust approved waste disposal companies with the disposal.

Contaminated container and packaging : In case of disposal of empty bottles, dispose bottles after removing the content thoroughly.

14. Transport information

International Regulations

Transport by sea(IMDG)

UN-No. (IMDG)	:	1276
Proper Shipping Name (IMDG)	:	n-PROPYL ACETATE
Packing group (IMDG)	:	II
Transport hazard class(es) (IMDG)	:	3

Air transport(IATA)

UN-No. (IATA)	:	1276
Proper Shipping Name (IATA)	:	n-Propyl acetate
Packing group (IATA)	:	II
Transport hazard class(es) (IATA)	:	3

Marine pollutant : Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Pollutant category	:	Y
MFAG-No	:	129

15. Regulatory information

Regulatory information with regard to this substance in your country or region should be examined by your own responsibility.

16. Other information

Data sources : Solvents Handbook, T, Asahara el, Kodansha Scientific Ltd. (1976) .
Handbook of Dangerous Substances Springer-Verlag Tokyo (1991) .
Handbook of 17322 Chemical Products, The Chemical Daily Co. (2022) .
NITE Chemical Risk Information Platform (NITE-CHRIP), National Institute of Technology and Evaluation.

The information contained herein is based on several references and the present state of our knowledge. However the SDS does not always cover all information about the product, handle the product carefully.The information is intended to ordinary usage, in case of particular handlings, conduct appropriate safety measurements.The information herein is only provision of information, and it does not represent a guarantee the properties of the product.The Safety Data Sheet(SDS) is prepared based on JIS Z7253.