

Chemical Safety Data Sheet

Section 1 IDENTIFICATION

GHS Product identifier: UNATE L-75.

Other means of identification: /

Recommended use of the chemical and restrictions on use: /

Supplier's details: /

Emergency phone number: /

Section 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture:

Flammable Liquids Category 2.

Eye Damage/Irritation Category 2A.

Specific Target Organ Toxicity (Single Exposure) Category 3 (Narcotic effects).

GHS Label elements, including precautionary statements:



Signal word: Danger

Hazard statement(s): Highly flammable liquid and vapor. Causes serious eye irritation. May cause drowsiness or dizziness.

Precautionary statement(s):

Prevention: Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/fume/gas/mist/ vapors/ spray. Wash ... thoroughly after handling. Use only outdoors or in a well-ventilated area. 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/ shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor/.../if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. In case of fire: Use foam, dry chemical powder, carbon dioxide, water spray to extinguish.

Storage: Store in well-ventilated place. Keep cool.

Disposal: Dispose of contents/container to

Other hazards which do not result in classification: /

Section 3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration%
Resin (Aromatic polyisocyanate)	53317-61-6	73-77
Ethyl Acetate	141-78-6	23-27
Other		0.5max

Section 4 FIRST AID MEASURES

Description of necessary first aid measures

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration.

Consult a physician.

In case of skin contact: Wash off with soap and plenty of water. Consult a physician.

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water.

Consult a physician.

Most important symptoms and effects, both acute and delayed: /

Indication of immediate medical attention and special treatment needed: /

Section 5 FIREFIGHTING MEASURES

Suitable extinguishing media: Foam. Dry chemical powder. Carbon dioxide. Water spray or fog - Large fires only.

Special hazards arising from the chemical: Liquid and vapour are highly flammable. Severe fire hazard when exposed to heat, flame and/or oxidisers. Vapour may travel a considerable distance to source of ignition. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO).

Special protective actions for fire-fighters: Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. If safe, switch off electrical equipment until vapour fire hazard removed. Use water delivered as a fine spray to control fire and cool adjacent area. Avoid spraying water onto liquid pools. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire.

Section 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Remove all ignition sources. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes.

Environmental precautions: Increase ventilation. Stop leak if safe to do so.

Methods and materials for containment and cleaning up: Water spray or fog may be used to disperse / absorb vapour. Contain spill with sand, earth or vermiculite. Use only spark-free shovels and explosion proof equipment. Collect recoverable product into labelled containers for recycling. Absorb remaining product with sand, earth or vermiculite. Collect solid residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains.

Section 7 HANDLING AND STORAGE

Precautions for safe handling: Avoid all personal contact, including inhalation. Wear protective clothing when risk of overexposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked. Avoid smoking, naked lights or ignition sources. Avoid generation of static electricity. DO NOT use plastic buckets. Earth all lines and equipment. Use spark-free tools when handling. Avoid contact with incompatible materials.

Conditions for safe storage, including any incompatibilities: Store in original containers in approved flame-proof area. No smoking, naked lights, heat or ignition sources. DO NOT store in pits, depressions, basements or areas where vapours may be trapped. Keep containers securely sealed. Store away from incompatible materials in a cool, dry well-ventilated area. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this MSDS.

Section 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters: /

Occupational Exposure Limits (OEL)

Source	Ingredient	Material name	TWA	STEL
China Occupational Exposure Limits for Hazardous Agents in the Workplace	ethyl acetate	Ethyl acetate	200 (mg/m3)	300 (mg/m3)

Emergency Limits

Ingredient	TEEL-0	TEEL-1	TEEL-2	TEEL-3
ethyl acetate	400(ppm)	400(ppm)	400(ppm)	2000(ppm)

Appropriate engineering controls: For flammable liquids and flammable gases, local exhaust ventilation or a process enclosure ventilation system may be required. Ventilation equipment should be explosion-resistant.

Personal protective equipment

Eye/face protection: Safety glasses with side shields. Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants.

Skin protection: Wear chemical protective gloves, eg. PVC. Wear safety footwear or safety gumboots, eg. Rubber. Impervious clothing, Flame retardant antistatic protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant.

Thermal hazards: /

Section 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, colour etc)	Colorless transparent viscous liquid
Odour	/
Odour Threshold	/
pH	/
Melting point/freezing point	/
Initial boiling point and boiling range	88°C
Flash point (closed cup)	5°C
Evaporation rate	/
Flammability (solid, gas)	/
Upper/lower flammability or explosive limits	/
Vapour pressure	228 mbar (at 50°C)
Vapour density (air=1)	/
Relative density (water=1)	1.17 (at 20 °C)
Solubility(ies)	6.694e-007 mg/l (at 25°C)
Partition coefficient: n-octanol/water	9.38
Auto-ignition temperature	> 500°C (DIN 51794)
Decomposition temperature	/
Viscosity	approx. 2000 mPa.s (at 25°C)

Section 10 STABILITY AND REACTIVITY

Reactivity: /

Chemical stability: Product is considered stable.

Possibility of hazardous reactions: Hazardous polymerisation will not occur.

Conditions to avoid: Heat, flames and sparks.

Incompatible materials: Strong oxidizing agents, acids.

Hazardous decomposition products: Carbon dioxide, other pyrolysis products typical of burning organic materia

Section 11 TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure: Inhaled, Ingestion, skin, eyes.

Symptoms related to the physical, chemical and toxicological characteristics: /

Acute health effects

Inhalation: Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by narcosis, reduced alertness, loss of reflexes, lack of coordination and vertigo.

Ingestion: Although ingestion is not thought to produce harmful effects, the material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (e.g liver, kidney) damage is evident.

Skin: The liquid may be miscible with fats or oils and may degrease the skin, producing a skin reaction described as non-allergic contact dermatitis. Repeated exposure may cause skin cracking, flaking or drying following normal handling and use.

Eyes: Evidence exists, or practical experience predicts, that the material may cause eye irritation in a substantial number of individuals and/or may produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals. Repeated or prolonged eye contact may cause inflammation characterised by a temporary redness

(similar to windburn) of the conjunctiva (conjunctivitis).

Chronic health effects: Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following.

Numerical measures of toxicity (such as acute toxicity estimates): Ethyl Acetate: Oral (rat) LD50: 5620 mg/kg, Inhalation (rat) LC50: 1600 ppm/8h, Inhalation (Human) TClO: 400 ppm/4h.

Section 12 ECOLOGICAL INFORMATION

Toxicity:

Ethyl Acetate

Fish: LC50 1500 mg/L 48 hr

Shellfish: EC50 164 mg/L 48 hr

Birds: EC50 3300 mg/L 48 hr

Persistence and degradability:

Resin (Aromatic polyisocyanate): log Kow 9.38, BIOWIN5:-0.9078

Bioaccumulative potential: Resin (Aromatic polyisocyanate): BCF 911.4

Mobility in soil: Resin (Aromatic polyisocyanate): Koc 5.905

Other adverse effects: /

Section 13 DISPOSAL CONSIDERATIONS

Disposal methods: Recycle wherever possible. Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified. Dispose of by: burial in a land-fill specifically licenced to accept chemical and / or pharmaceutical wastes or Incineration in a licenced apparatus (after admixture with suitable combustible material). Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

Section 14 TRANSPORT INFORMATION

UN number: 1866.

UN proper shipping name: RESIN SOLUTION, flammable.

Transport hazard class(es) : 3.

Packing group, if applicable: II.

Environmental hazards: /

Special precautions for user: /

Section 15 REGULATORY INFORMATION

Regulations: This safety data sheet is in compliance with the following national standards: GB 16483-2008, GB 13690-2009, GB/T 15098-2008, GB 18218-2018, GB 15258-2009, GB 6944-2012, GB 190-2009, GB 191-2009, GB 12268-2012, as well as the following national regulations: Dangerous Goods Transport Administrative Regulation [Published by the Ministry of Railways, 2008], Dangerous Chemicals Safety Administrative Regulation [Published by the State Council, 2011].

Section 16 OTHER INFORMATION

References	UN Recommendations on the Transport of Dangerous Goods Model
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	Regulations UN Globally Harmonized System of Classification and Labelling of Chemicals
Form Date	24-Mar-2022

Note 1: When products contain two or more hazardous substances, Safety Data Sheets should be prepared based on the risk of the mixture.

Note 2: Manufacturer / supplier should ensure the correctness of the information contained in the safety data sheets, and updated in a timely manner.

Note 3: As a result of product features without the existence of certain information or no data available (such as boiling point does not exist for the solid) in the table with "/" logo.