

Creation Date 2023/11/29

## Safety Data Sheet

### Section 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name	Acryl Dine B
Name of Supplier	Shinko Plastics Co., Ltd.
Address	1-5-24, Minamisuna,Koto-ku, Tokyo
Phone Number	03-3645-8106
Recommended Use of the Chemical	Adhesives for Resins
Restriction on Use	If the product is to be used for applications other than those recommended, seek the judgment of an expert/chemical substance specialist, etc.

### Section 2 – HAZARDS IDENTIFICATION

#### GHS Classification of the Chemical

Physical Hazards	Flammable liquids–Category 2
Health Hazards	Acute toxicity – oral–Category 4 Acute toxicity – inhalation(vapour)–Category 3 Serious eye damage/eye irritation–Category 2A  Carcinogenicity–Category 1B Specific target organ toxicity(single exposure)–Category 1 (liver blood system respiratory apparatus gastrointestinal tract cardiovascular system kidney central nervous system)  Specific target organ toxicity(single exposure)–Category 3 (narcotic effects) Specific target organ toxicity(repeated exposure)–Category 1 (liver thyroid cardiovascular system nervous system) Specific target organ toxicity(repeated exposure)–Category 2 (blood system kidney)
Environmental Hazard	Hazardous to aquatic environment short-term (acute)–Category 2 Hazards except for cited above are Not classified or Classification not possible.

#### GHS Label Elements

##### Pictograms



Signal Word	Danger
Hazard Statements	Highly flammable liquid and vapour Harmful if swallowed Causes serious eye irritation Toxic if inhaled May cause drowsiness and dizziness May cause cancer Causes damage to liver,blood system,respiratory apparatus,gastrointestinal tract,cardiovascular system,kidney,central nervous system.

Causes damage to liver,thyroid,cardiovascular system,nervous system through prolonged or repeated exposure  
May cause damage to blood system,kidney through prolonged or repeated exposure  
Toxic to aquatic life

Precautionary Statements

Prevention

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
  
Keep container tightly closed.  
Ground or bond container and receiving equipment.  
  
Use explosion-proof electrical/ventilating/lighting.

Use only non-sparking tools.  
Take precautionary measures against static discharge.  
Do not breathe dust/fume/gas/mist/vapours/spray.  
Wash hands thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
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): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If exposed or concerned, get medical advice and attention.  
Call a doctor.  
Call a doctor if you feel unwell.  
Get medical advice and attention if you feel unwell.

Rinse mouth.  
If eye irritation persists: Get medical advice and attention.  
In case of fire: Use appropriate media for extinction.

Storage

Store in a well-ventilated place keeping container tightly closed.  
Store in a well-ventilated place. Keep cool.  
Store locked up.

Disposal Dispose of contents and container in accordance with local, regional, national and international regulations (to be specified).  
Outsource the work to a professional waste disposal company.

## Section 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Distinction of Substance  
or Mixture

Mixture

Generic Name	Concentration or Its Ranges	Formula	ENCS No./ISHL No.		CAS RN
			Chemical Substances Control Act	ISHL No.	
Acrylic Resins	5.4%	(C <sub>5</sub> H <sub>8</sub> O <sub>2</sub> ) <sub>x</sub>	(6)-524	Existing	9011-14-7
Cyclohexane	2.8%	C <sub>6</sub> H <sub>12</sub>	(3)-2233	Existing	110-82-7
1,2-Dichloroethane	91.8%	C <sub>2</sub> H <sub>4</sub> Cl <sub>2</sub>	(2)-54	2-(13)-23	107-06-2

Impurities and/or  
Stabilizing Additives which  
Contribute to the GHS  
Classification

No information available

Chemical Substances  
Control ActPriority Assessment Chemical  
Substances (Act, Art.2, Para.5)1,2-Dichloroethane (Government  
Ordinance Number: 11)Industrial Safety and  
Health ActDangerous or Harmful  
Substances for Notification of  
Chemical Name etc. on SDS  
(Act, Art.57-2, Enforcement  
Order, Art.18-2 Item 1 and 2,  
Appended Table 9)Cyclohexane (Government Ordinance  
Number: 96)Cyclohexane (Government Ordinance  
Number: 232) (Less than 10%)Act for PRTR and  
Promotion of Chemical  
ManagementClass 1 Designated Chemical  
Substances (Act, Art.2, Para.2,  
Enforcement Order, Art.1  
Appended Table 1)Dichloroethane (Government  
Ordinance Number: 240) (90%~100%)

1,2-Dichloroethane (JPSN: 157) (92%)

Cyclohexane (JPSN: 629) (2.8%)

## Section 4 – FIRST AID MEASURES

Inhalation

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.  
Call a doctor.  
If exposed or concerned, get medical advice and attention.

Skin Contact	<p>IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.</p> <p>IF ON SKIN: Wash with plenty of soap and water.</p> <p>If skin irritation occurs: Get medical advice and attention.</p> <p>If exposed or concerned, get medical advice and attention.</p>
Eye Contact	<p>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>If eye irritation persists: Get medical advice and attention.</p> <p>If exposed or concerned, get medical advice and attention.</p>
Ingestion	<p>IF SWALLOWED: Immediately call a doctor. Rinse mouth.</p> <p>If exposed or concerned, get medical advice and attention.</p> <p>Being a volatile liquid, forcing to vomit increases risks such as aspirating into the lungs. Arrange medical treatment immediately. Also, have mouth rinsed thoroughly with water.</p> <p>Never give anything by mouth to an unconscious person.</p>

## Section 5 – FIRE FIGHTING MEASURES

Suitable Extinguishing Media	<p>Small fires: Dry chemical, CO<sub>2</sub>, water spray or regular foam.</p>
Unsuitable Extinguishing Media	<p>Large fires: Water spray, fog or regular foam.</p>
Specific Hazards	<p>Straight streams.</p> <p>Risk of producing harmful gases such as carbon monoxide. Avoid inhalation of smoke or gases.</p>
Specific Fire Fighting	<p>In case of fire: Use appropriate media for extinction.</p> <p>Fight fire from upwind position if possible</p> <p>In surrounding fire, move containers instantly to safe place, if movable.</p> <p>Prohibit unauthorized staff from entering the area around the fire.</p> <p>Keep unnecessary people away.</p>
Protection of Fire Fighter	<p>Use goggles in combination with dust mask, and another protections as appropriate to situation.</p>

## Section 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures	<p>Use goggles in combination with dust mask, and another protections as appropriate to situation.</p> <p>Large spills :Evacuate area.</p> <p>Ensure adequate ventilation.</p>
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Storage	Conditions for Safe Storage	<p>Fire Prohibited</p> <p>Store locked up. Store in a well-ventilated place keeping container tightly closed. The storage facility should be designed with fire-proof construction and beams should use a non-combustible material. The roof of a storage facility should be made of a non-combustible material and use metals or other lightweight non-combustible materials. No ceiling should be installed. The storage floor should be protected from water penetration, or should have water-proof construction. The storage floor should have penetration-proof construction against dangerous goods and be inclined adequately. A proper sump should be provided to catch any spills. The storage facility should be provided with necessary lighting, lighting equipment, and ventilator to store and handle dangerous goods.</p>
	Safe Materials used in Packagings/Containers	No information available

Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

	Japan Administration Level	Permission concentration (Exposure Limits, Biological Exposure Indices)	
		Japan Society for Occupational Health	ACGIH
Acrylic Resins	Not listed	Not listed	Not listed
Cyclohexane	Not listed	150ppm(520mg/m <sup>3</sup> )	Listed(*)
1,2-Dichloroethane	10ppm	10ppm(40mg/m <sup>3</sup> )	Listed(*)

\*)Please refer to the following URL for ACGIH setting values.

Reference: <https://www.acgih.org/>

Engineering Controls		<p>Use local exhaust ventilation in case of production of fume or mist. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use explosion-proof electrical equipment and prevent from static electricity.</p>
Personal Protective Equipment	<p>Respiratory Protection Hand Protection Eye/Face Protection Skin and Body Protection</p>	<p>If necessary, wear respiratory protection. Wear protective gloves. Wear eye protection/face protection. Wear protective clothing.</p>

## Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State		Liquid
Appearance		Viscous liquid
Colour		No data available
Odour		Specific odour to product
Melting Point/Freezing Point		-40°C (1,2-Dichloroethane)
Boiling Point or Initial Boiling Point and Boiling Ranges		83~84°C (1,2-Dichloroethane)
Combustible		Combustible
Lower and Upper Explosion Limit / Flammability Limit	Lower	No data available
Flash Point	Upper	No data available
Auto-Ignition Temperature		10°C (SETA closed cup)
Decomposition Temperature		No data available
pH		No data available
Kinematic Viscosity		No data available
Solubility		9.2 g/L (0°C) (1,2-Dichloroethane)
Partition coefficient: n-octanol/water (log value)		No data available
Vapour Pressure		10.6kPa (25°C) (1,2-Dichloroethane)
Density and/or Relative Density		No data available
Relative Gas Density		No data available
Particle Characteristics		No data available

## Section 10 – STABILITY AND REACTIVITY

Reactivity	Avoid contact with oxidizing agents: Reacts.
Chemical Stability	Stable under normal conditions.
Possibility of Hazardous Reaction	No hazardous reactions or polymerization may occur, releasing excess pressure or heat, or creating other hazardous conditions.
Conditions to Avoid	Avoid heat, flames, sparks and other sources of ignition.
Incompatible substances	Strong oxidizing agents, and strong bases.
Hazardous Decomposition Products	Combustion produces carbon monoxide, carbon dioxide, and hydrogen chloride.

## Section 11 – TOXICOLOGICAL INFORMATION

Acute toxicity	Oral	Category 4:1,2-Dichloroethane(toxicity value =670mg/kg source: NITE)
		Not classified:Cyclohexane(toxicity value =6240mg/kg source: NITE)
		No Data:Acrylic Resins
		Calculation result = 729.8474946mg/kg.
		Classification result = Category 4.

Dermal	<p>Not classified:1,2-Dichloroethane(toxicity value =2800mg/kg source: NITE), Cyclohexane(toxicity value =2500mg/kg source: NITE)</p> <p>No Data:Acrylic Resins Contains substance of unknown toxicity. Changed from Not classified to Classification not possible.</p>
Inhalation	<p>(Acute toxicity (Inhalation : Gases)) Does not fall under gas based on GHS definitions.</p> <p>(Acute toxicity (Inhalation : Vapours)) Category 3:1,2-Dichloroethane(toxicity value =1000ppm source: NITE) Not classified:Cyclohexane(toxicity value =9500ppm source: NITE) No Data:Acrylic Resins Calculation result = 1085.8383815mg/kg. Classification result = Category 3. (Acute toxicity (Inhalation : dust/mist)) Unable to classify due to insufficient data. Category 2:Cyclohexane(source: NITE) Not classified:1,2-Dichloroethane(source: NITE)</p>
Skin corrosion/irritation	<p>No Data:Acrylic Resins Substances classified as hazardous are below the concentration limit. Contains substance of unknown toxicity. Changed from Not classified to Classification not possible.</p>
Serious eye damage/eye irritation	<p>Category 2:Cyclohexane(source: NITE)</p> <p>Category 2B:1,2-Dichloroethane(source: NITE)</p>
Respiratory sensitization	<p>No Data:Acrylic Resins Eye Category 2B + Eye Category 2 &gt;= Concentration limit(10%). Classification result = Category 2A.</p>
Skin sensitization	<p>Unable to classify due to insufficient data.</p>
Germ cell mutagenicity	<p>Unable to classify due to insufficient data.</p>
Carcinogenicity	<p>Category 1B:1,2-Dichloroethane(source: NITE)</p> <p>Classification not possible:Cyclohexane(source: NITE)</p>
Reproductive toxicity	<p>No Data:Acrylic Resins 1,2-Dichloroethane <math>\geq</math> 0.1%. Classification result = Category 1B. (Reproductive toxicity) Not classified:Cyclohexane(source: NITE) Classification not possible:1,2-Dichloroethane(source: NITE) No Data:Acrylic Resins Contains substance of unknown toxicity. Changed from Not classified to Classification not possible.</p>



(Reproductive toxicity, effects on or via lactation)

Specific target organ  
toxicity – Single exposure

No Data:Acrylic Resins  
Category 1:1,2-Dichloroethane(organ=liver,blood system,respiratory apparatus,gastrointestinal tract,cardiovascular system,kidney,central nervous system source: NITE)

Category 2:Cyclohexane(organ=cardiovascular system source: NITE)

Category 3:1,2-Dichloroethane(organ=narcotic effect source: NITE), Cyclohexane(organ=narcotic effect,respiratory tract irritation source: NITE)

No Data:Acrylic Resins

1,2-Dichloroethane  $\geq 10\%$ .

Classification result = Category 1(liver, blood system, respiratory apparatus, gastrointestinal tract, cardiovascular system, kidney, central nervous system).

The sum of the components in Category 3(narcotic effect)  $\geq$  Concentration limit(20%).Classification result = Category 3(narcotic effect).

Specific target organ  
toxicity – Repeated exposure

Ingredients not contributing to classification:

Cyclohexane(Category 2 source: NITE)

Category 1:1,2-

Dichloroethane(organ=liver,thyroid,cardiovascular system,nervous system source: NITE)

Category 2:1,2-Dichloroethane(organ=blood,kidney source: NITE)

Classification not possible:Cyclohexane(source: NITE)

No Data:Acrylic Resins

1,2-Dichloroethane  $\geq 10\%$ .

Classification result = Category 1(liver, thyroid, cardiovascular system, nervous system).

1,2-Dichloroethane  $\geq 10\%$ .

Classification result = Category 2(blood system, kidney).

Aspiration hazard

Unable to classify due to insufficient data.

## Section 12 – ECOLOGICAL INFORMATION

Ecotoxicity

Hazardous to aquatic  
environment short-term  
(acute)

Category 1:Cyclohexane(source: NITE)

Category 3:1,2-Dichloroethane(source: NITE)

No Data:Acrylic Resins

(M factor x 10 x Category 1) + Category 2  $\geq$  Concentration limit(25%). Classification result = Category 2.

Hazardous to aquatic environment long-term (chronic)

Category 3:Cyclohexane(source: NITE)

Not classified:1,2-Dichloroethane(source: NITE)

No Data:Acrylic Resins  
(M factor x 100 x Category 1) + (10 x Category 2) + Category 3 >= Concentration limit(\$VALUE%).  
Contains substance of unknown toxicity. Changed from Not classified to Classification not possible.

Persistence and degradability  
Bioaccumulative potential

No information available

No information available

Mobility in soil  
Hazardous to the ozone layer

No information available

Unable to classify due to insufficient data.

Section 13 – DISPOSAL CONSIDERATIONS

Residual Waste

Dispose of contents and container in accordance with local, regional, national and international regulations (to be specified).

Outsource the work to a professional waste disposal company.

Comply with the standards for The Special Control Industrial Wastes under the Waste Disposal Public Cleansing Law (Japan) to dispose of the concerned wastes.

Contaminated Container and Packaging

Recycle containers after cleansing, or carry out the disposal under the related laws and regulations and the standards of the local governments.

In case of disposal of empty containers, remove the content thoroughly.

Section 14 – TRANSPORT INFORMATION

International Regulations

Regulatory Information by Sea

Complied with IMO.

UN No.

1133

Proper Shipping Name.

ADHESIVES

Class

3

Packing Group

II

Marine Pollutant

Not applicable

Transport in bulk according to MARPOL

Not applicable

73/78,Annex II ,and the IBC code

Regulatory Information by Air

Complied with ICAO/IATA.

UN No.

1133

Proper Shipping Name.

ADHESIVES

Regulations in Japan

Class	3
Packing Group	II
Regulatory Information	Complies with the Fire Service Act.
Regulatory Information	Complies with the Marine Transportation Safety Act
UN No.	1133
Proper Shipping Name	ADHESIVES
Class	3
Packing Group	II
Marine Pollutant	Not Applicable
Transport in bulk according to MARPOL 73/78, Annex II ,and the IBC code.	Not Applicable

Specific Safety Measures

Regulatory Information	Complies with the Civil Aeronautics Act
UN No.	1133
Proper Shipping Name	ADHESIVES
Class	3
Packing Group	II
	Before transport containers shall be examined for external signs of damage, corrosion, leakage, etc.

In transport, loading of containers should be ensured protection from sunlight, to prevent damage, corrosion, leakage, and collapse of the load.

Do not stack heavy goods.

Carry a yellow card when transferring.

Emergency Response Guide Number 128

Section 15 – REGULATORY INFORMATION

Three laws requiring offer of SDS

Industrial Safety and Health Act Applicable

Poisonous and Deleterious Substances Act for PRTR and Not Applicable

Promotion of Chemical Management Applicable

Main applicable domestic laws and regulations  
 Chemical Substances Control Act Priority Assessment Chemical Substances (Act, Art.2, Para.5)(1,2-Dichloroethane,Cyclohexane)

Industrial Safety and Health Act Group 2, Specified Chemical Substances, Special Organic Solvents (Ordinance on Prevention of Hazards Due to Specified Chemical Substances, Art.2, Para.1, Item 2, 3-2, 3-3)(1,2-Dichloroethane)

Dangerous or Harmful Substances for Labeling of Chemical Name etc. (Act Art.57 Para.1, Enforcement Order, Art.18 Item 1 and 2, Appended Table No.9 )(Cyclohexane,Dichloroethane)

Dangerous Substances, Flammable Substances  
(Enforcement Order, Art., Appended Table 1, Item  
4)

Published Substances of the Guidelines for  
Preventing the Impairment of Workers' Health (Act,  
Art.28, Para.3, MHLW Noticed Guideline)(1,2-  
Dichloroethane)

Dangerous or Harmful Substances for Notification  
of Chemical Name etc. on SDS (Act, Art.57-2,  
Enforcement Order, Art.18-2 Item 1 and 2,  
Appended Table 9)(Cyclohexane,Dichloroethane)

Specified Chemical Substances, Substances under  
Special Supervision (Ordinance on Prevention of  
Hazards Due to Specified Chemical Substances,  
Art.38-3)(1,2-Dichloroethane)

Water Pollution Control  
Act

Hazardous Substances (Act, Art.2, Enforcement  
Order Art.2, Ministerial Ordinance to Provide for  
Effluent Standards, Art.1)(1,2-Dichloroethane)

Fire Service Act

Group 4, Flammable Liquids, Class 1 Petroleums,  
Water-insoluble liquids (Act, Art.2, Para.7,  
Appended Table 1, Group 4)

Air Pollution Control Act

Hazardous Air Pollutants, Priority Substances  
(Central Environment Council Report No. 9)(1,2-  
Dichloroethane)

Ship Safety Act

Flammable liquids (Regulations for the Carriage  
and Storage of Dangerous Goods in Ships, Art.3,  
Notification for Establishing Standards for the  
Carriage of Dangerous Goods in Ships., Appended  
Table 1)

Civil Aeronautics Act

Flammable liquids (Ordinance for Enforcement,  
Art.194, Notification for Establishing Standards for  
the Carriage of Explosives etc., Appended Table 1)

Waste Management and  
Public Cleansing Act  
Act for PRTR and  
Promotion of Chemical  
Management

Specially Controlled Industrial Wastes, (Act, Art.2,  
Para.5, Enforcement Order, Art.2-4)

Class 1 Designated Chemical Substances (Act,  
Art.2, Para.2, Enforcement Order, Art.1 Appended  
Table 1)(1,2-Dichloroethane,Cyclohexane)

Labor Standard Act

Chemical Substances Causing Illness (Act, Art.75,  
Para.2, Enforcement Regulations, Appended Table  
No.1-2, Item 4-1)(1,2-Dichloroethane)

Soil Contamination  
Countermeasure Act

Specified Hazardous Substances (Act, Art.2, Para.  
1, Enforcement Order, Art.1)(1,2-Dichloroethane)

## Section 16 – OTHER INFORMATION

Technical Contact  
Literature

Shinko Plastics Co., Ltd.  
NITE GHS Classification published data  
EU CLP Regulation, AnnexVI

## Disclaimer

The statements herein are made by the generally available data and our own data, however we are not able to investigate all of the present scientific and technology information, therefore we do not guarantee any matters.

And the attention matters are in regard of generally handlings, so the user shall take care with the special attention to the special handlings.