

Creation Date 2023/11/29

## Safety Data Sheet

### Section 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name	Acryl Dine C
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 Skin corrosion/irritation–Category 2 Serious eye damage/eye irritation–Category 2B  Carcinogenicity–Category 1B Reproductive toxicity–Category 1A Additional category: Effects on or via lactation 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 respiratory tract irritation) Specific target organ toxicity(repeated exposure)– Category 1 (liver thyroid cardiovascular system nervous system kidney central nervous system)  Specific target organ toxicity(repeated exposure)– Category 2(blood system)
Environmental Hazards	Hazardous to aquatic environment short-term (acute)–Category 3 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 skin and eye irritation Toxic if inhaled

May cause respiratory irritation  
May cause drowsiness and dizziness  
May cause cancer  
May damage fertility or the unborn child  
May cause harm to breast-fed children  
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,kidney,central nervous system through prolonged or repeated exposure

May cause damage to blood system through prolonged or repeated exposure  
Harmful 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.  
Avoid contact during pregnancy/while nursing.  
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: Wash with plenty of soap and water.  
  
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 skin irritation occurs: Get medical advice and attention.

If eye irritation persists: Get medical advice and attention.

Take off contaminated clothing and wash it before reuse.

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	11.9%	(C5H8O2) <sub>x</sub>	(6)-524	Existing	9011-14-7
Toluene	23.7%	C7H8	(3)-2,(3)-60	Existing	108-88-3
1,2-Dichloroethane	64.4%	C2H4Cl2	(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 Act

Priority Assessment Chemical  
Substances (Act, Art.2, Para.5)

1,2-Dichloroethane (Government  
Ordinance Number: 11)

Industrial Safety and  
Health Act

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)

Toluene (Government Ordinance  
Number: 46)

Dichloroethane (Government  
Ordinance Number: 240) (60%~70%)

Toluene (Government Ordinance  
Number: 407) (20%~30%)

Act for PRTR and  
Promotion of Chemical  
Management

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

1,2-Dichloroethane (JPSN: 157) (64%)

Toluene (JPSN: 300) (24%)

#### 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

IF ON SKIN (or hair): Remove/Take off  
immediately all contaminated clothing. Rinse skin  
with water/shower.

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation occurs: Get medical advice and  
attention.

If exposed or concerned, get medical advice and  
attention.

Eye Contact

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 and  
attention.

If exposed or concerned, get medical advice and  
attention.

Ingestion

IF SWALLOWED: Immediately call a doctor.

Rinse mouth.

If exposed or concerned, get medical advice and  
attention.

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.

Never give anything by mouth to an unconscious  
person.

#### Section 5 – FIRE FIGHTING MEASURES

Suitable Extinguishing Media

Small fires: Dry chemical, CO<sub>2</sub>, water spray or  
regular foam.

Large fires: Water spray, fog or regular foam.

Unsuitable Extinguishing Media

Straight streams.

Specific Hazards

Risk of producing harmful gases such as carbon  
monoxide. Avoid inhalation of smoke or gases.

Specific Fire Fighting

In case of fire: Use appropriate media for  
extinction.

Fight fire from upwind position if possible

In surrounding fire, move containers instantly to  
safe place, if movable.

Prohibit unauthorized staff from entering the area  
around the fire.

Protection of Fire Fighter  
Keep unnecessary people away.  
Use goggles in combination with dust mask, and another protections as appropriate to situation.

## Section 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions,  
Protective Equipment and  
Emergency Procedures  
Use goggles in combination with dust mask, and another protections as appropriate to situation.

Environmental  
Precautions  
Methods and Materials for  
Containment and Cleaning  
up  
Large spills :Evacuate area.  
Ensure adequate ventilation.  
Do not discharge into the drains, surface waters or ground water directly.  
small spill : absorb with material such as non-combustible material wash thoroughly after handling  
Large spills: Dike spills and dispose of in safe area.  
If not harmful, evaporate and disperse while being careful of fire and ventilation. You may also spray water to accelerate the evaporation.

Secondary Disaster  
Prevention Measures  
Keep away from sources of ignition and prepare extinguishing media.  
Avoid spreading product as it may cause accidents resulting in slips and falls.  
Do not recklessly walk on the spillage.

## Section 7 – HANDLING AND STORAGE

Handling	Technical Measures	Ground/bond container and receiving equipment.  Use only non-sparking tools. Use explosion-proof electrical/ventilating/lighting.  Take precautionary measures against static discharge. 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.
	Precautions for Safe Handling	Fire Prohibited  Do not handle until all safety precautions have been read and understood. Avoid release to the environment. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Avoid contact during pregnancy/while nursing. Keep cool.

Do not breathe dust/fume/gas/mist/vapours/spray.  
Obtain special instructions before use.  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Keep container tightly closed.

Prevents Handling of Refer to "10. Stability and reactivity".

Incompatible Substances or Mixtures

Specific Hygiene Measures Wash hands thoroughly after handling.

Storage

Conditions for Safe Storage Fire Prohibited

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.

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
Toluene	20ppm	50ppm(188mg/m3)(Skin)	Listed(*)
1,2-Dichloroethane	10ppm	10ppm(40mg/m3)	Listed(*)

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

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

Engineering Controls		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.
Personal Protective Equipment	Respiratory Protection	If necessary, wear respiratory protection.
	Hand Protection	Wear protective gloves.
	Eye/Face Protection	Wear eye protection/face protection.
	Skin and Body Protection	Wear protective clothing.

## 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		No data available
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
	Upper	No data available
Flash Point		17°C (SETA closed cup)
Auto-Ignition Temperature		No data available
Decomposition Temperature		No data available
pH		No data available
Kinematic Viscosity		No data available
Solubility		Slightly soluble in water
Partition coefficient: n-octanol/water (log value)		No data available
Vapour Pressure		No data available
Density and/or Relative Density		1.25
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  
Hazardous Decomposition Products

Strong oxidizing agents, and strong bases.  
Combustion produces carbon monoxide, carbon dioxide, and hydrogen chloride.

Section 11 – TOXICOLOGICAL INFORMATION

Acute toxicity	Oral	<p>Category 4:1,2-Dichloroethane(toxicity value =670mg/kg source: NITE)                  Not classified:Toluene(toxicity value =5000mg/kg source: NITE)                  No Data:Acrylic Resins                  Calculation result = 873.4931736mg/kg.                  Classification result = Category 4.</p>
	Dermal	<p>Not classified:1,2-Dichloroethane(toxicity value =2800mg/kg source: NITE), Toluene(toxicity value =12000mg/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)                  Category 4:Toluene(toxicity value =3319ppm source: NITE)                  No Data:Acrylic Resins                  Calculation result = 1231.4667567mg/kg.                  Classification result = Category 3.</p> <p>(Acute toxicity (Inhalation : dust/mist))                  Unable to classify due to insufficient data.</p>
Skin corrosion/irritation		<p>Category 2:Toluene(source: NITE)                  Not classified:1,2-Dichloroethane(source: NITE)</p> <p>No Data:Acrylic Resins                  The sum of the components in Category 2 <math>\geq</math> Concentration limit(10%).Classification result = Category 2.</p>
Serious eye damage/eye irritation		<p>Category 2B:1,2-Dichloroethane(source: NITE), Toluene(source: NITE)                  No Data:Acrylic Resins                  The sum of the components in Category 2B <math>\geq</math> Concentration limit(10%).Classification result = Category 2B.</p>
Respiratory sensitization		<p>Unable to classify due to insufficient data.</p>
Skin sensitization		<p>Not classified:Toluene(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>
Germ cell mutagenicity		<p>Not classified:Toluene(source: NITE)</p>



	<p>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>
Carcinogenicity	<p>Category 1B:1,2-Dichloroethane(source: NITE)  Classification not possible:Toluene(source: NITE)  No Data:Acrylic Resins 1,2-Dichloroethane<math>\geq</math>0.1%. Classification result = Category1B. (Reproductive toxicity) Category 1A:Toluene(source: NITE) Classification not possible:1,2-Dichloroethane(source: NITE) No Data:Acrylic Resins Toluene<math>\geq</math>0.3%. Classification result = Category 1A. (Reproductive toxicity, effects on or via lactation)  Additional category: Effects on or via lactation:Toluene(source: NITE) No Data:Acrylic Resins Toluene<math>\geq</math>0.3%. Classification result = Additional category: Effects on or via lactation. Category 1:1,2-Dichloroethane(organ=liver、 blood system、 respiratory apparatus、 gastrointestinal tract、 cardiovascular system、 kidney、 central nervous system source: NITE), Toluene(organ=central nervous system source: NITE)  Category 3:1,2-Dichloroethane(organ=narcotic effect source: NITE), Toluene(organ=narcotic effect、 respiratory tract irritation source: NITE)  No Data:Acrylic Resins 1,2-Dichloroethane<math>\geq</math>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 effects) <math>\geq</math> Concentration limit(20%).Classification result = Category 3(narcotic effects).  The sum of the components in Category 3(respiratory tract irritation) <math>\geq</math> Concentration limit(20%).Classification result = Category 3(respiratory tract irritation).</p>
Reproductive toxicity	
Specific target organ toxicity – Single exposure	

Specific target organ toxicity – Repeated exposure

Category 1:1,2-Dichloroethane(organ=liver, thyroid, cardiovascular system, nervous system source: NITE), Toluene(organ=kidney, central nervous system source: NITE)

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

No Data:Acrylic Resins

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

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

Toluene  $\geq$  10%.

Classification result = Category 1(kidney, central nervous system).

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

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

Category 2:1,2-Dichloroethane (kidney) was combined into the higher category Category 1:Toluene (kidney).

Unable to classify due to insufficient data.

Aspiration hazard

## Section 12 – ECOLOGICAL INFORMATION

Ecotoxicity

Hazardous to aquatic environment short-term (acute)

Category 2:Toluene(source: NITE)

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

No Data:Acrylic Resins

(M factor x 100 x Category 1) + (10 x Category 2) + Category 3  $\geq$  Concentration limit(25%).

Classification result = Category 3.

Category 3:Toluene(source: NITE)

Hazardous to aquatic environment long-term (chronic)

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

No Data:Acrylic Resins

(M factor x 100 x Category 1) + (10 x Category 2) + Category 3  $\geq$  Concentration limit(\$VALUE%).

Contains substance of unknown toxicity. Changed from Not classified to Classification not possible.

Persistence and degradability

No information available

Bioaccumulative potential

No information available

Mobility in soil

No information available

Hazardous to the ozone layer

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).

Contaminated Container and Packaging

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.  
 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 UN No. Proper Shipping Name. Class Packing Group Marine Pollutant Transport in bulk according to MARPOL 73/78,Annex II ,and the IBC code	Complied with IMO.  1133 ADHESIVES  3 II Not applicable Not applicable
Regulations in Japan	Regulatory Information by Air UN No. Proper Shipping Name. Class Packing Group Regulatory Information by Road or Rail Regulatory Information by Sea UN No. Proper Shipping Name. Class Packing Group Marine Pollutant Transport in bulk according to MARPOL 73/78,Annex II ,and the IBC code.	Complied with ICAO/IATA.  1133 ADHESIVES  3 II Complies with the Fire Service Act.  Complies with the Marine Transportation Safety Act 1133 ADHESIVES  3 II Not Applicable Not Applicable
	Regulatory Information by Air UN No.	Complies with the Civil Aeronautics Act 1133

Proper Shipping Name.	ADHESIVES
Class	3
Packing Group	II
Specific Safety Measures	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 Promotion of Chemical Management	Not Applicable
Main applicable domestic laws and regulations	Applicable
Chemical Substances Control Act	Priority Assessment Chemical Substances (Act, Art.2, Para.5)(1,2-Dichloroethane,Toluene)
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)  Class 2 Organic Solvents etc. (Enforcement Order, Art., Appended Table 6-2, Ordinance on Prevention of Organic Solvent Poisoning, Art.1, Para.1, Item 4)(Toluene)  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 )(Dichloroethane,Toluene)  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)(Dichloroethane,Toluene)

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

Designated Substances (Act, Art.2, Para.4, Enforcement Order, Art.3-3)(Toluene)  
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) (Toluene,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,Toluene)

Labor Standard Act

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