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ZAIQ-RF(HH)-01-19

# Safety Data Sheet



Applicant name: UPCHEM (CHINA) CO., LTD

Product Name: 3,4-Dichlorophenyl isocyanate


Edit date: 2021-01-11

Edit institution: Technology Center of Hangzhou Customs District

Approver:



1. Unless other wise stated, this test report is only responsible for the sample(s).
2. This test report can not be reproduced,except in full,without prior written permission of the lab.

1. Identification of substance	
Product Name	3,4-Dichlorophenyl isocyanate
Other Name	None
Chemical Name	None
Recommended Use	Intermediate for pesticide chemicals
Manufacturer	UPCHEM (CHINA) CO., LTD
Address	NO.339, LVGU AVE, LISHUI ECONOMIC DEVELOPMENT ZONE, LISHUI, CHINA /323000
Phone Number	+86-0578-2990666
Fax Number	+86-0578-2176055
WEB	None
Emergency Phone Number	+86-0578-2697666 or call your nearest poison control centre
2. Hazards identification	
GHS classification	Acute toxicity-oral 3 Acute toxicity- inhalation 4 Skin corrosion/irritation 2 Serious eye damage/eye irritation 2A Sensitisation-skin 1 Sensitisation-respiratory 1 Specific target organ toxicity, single exposure 3
GHS Pictograms	
Signal words	Danger
Hazard statements	H301: Toxic if swallowed H315: Causes skin irritation H317: May cause an allergic skin reaction H319: Causes serious eye irritation H332: Harmful if inhaled H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled H335: May cause respiratory irritation
Precautionary Statement Prevention	P261: Avoid breathing dust/fume/gas/mist/vapours/spray. P264: Wash hands thoroughly after handling. P270: Do not eat, drink or smoke when using this product. P271: Use only outdoors or in a well-ventilated area. P272: Contaminated work clothing should not be allowed out of the work place. P280: Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. P284: [In case of inadequate ventilation] Wear respiratory protection.

**Precautionary Statement Response**

P301+P316:IF SWALLOWED: Get emergency medical help immediately.  
 P302+P352:IF ON SKIN: Wash with plenty of water/...  
 P304+P340:IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P305+P351+P338:IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P317:Get medical help.  
 P319:Get medical help if you feel unwell.  
 P321:Specific treatment (see the supplemental first aid instruction).  
 P330:Rinse mouth.  
 P332+P317:If skin irritation occurs:Get medical help.  
 P333+P317:If skin irritation or rash occurs: Get medical help.  
 P337+P317:If eye irritation persists: Get medical help.  
 P342+P316:If experiencing respiratory symptoms: Get emergency medical help immediately.  
 P362+P364:Take off immediately contaminated clothing and wash it before reuse.

**Precautionary Statement Storage** P403+P233:Store in a well-ventilated place. Keep container tightly closed.  
 P405:Store locked up.

**Precautionary Statement Disposal** P501 Dispose of contents/container in according with local regulation.

**Other hazards which do not result in classification** Not available.

**3. Composition/information on ingredients**

**Substances**  
 **Mixtures**

**Component Information**

Component	CAS number	EINECS number	Mass(%)
3,4-Dichlorophenyl isocyanate	102-36-3	203-026-2	99%wt

Note: 1. Unless a component presents a severe hazard, it does not need to be considered in the SDS if the concentration is less than 1%.

**4. First-aid measures**

**NOTE TO PHYSICIAN**

After inhalation In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation.  
 Move to fresh air. Oxygen or artificial respiration if needed.  
 Get immediate medical attention.

After skin contact	Immediately flush skin with plenty of water. Remove and isolate contaminated clothing and shoes. If irritation persists, get medical attention immediately. For minor skin contact, avoid spreading material on unaffected skin. Wash clothing separately before reuse.
After eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Assure adequate flushing of the eyes by separating the eyelids with fingers. Get medical attention immediately.
After ingestion	Do not induce vomiting without medical advice. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Loosen tight clothing such as a collar, tie, belt or waistband. Do not use mouth-to-mouth method if victim ingested the substance. Seek immediate medical attention.
Most important symptoms/effects, acute and delayed	Toxic if swallowed Causes skin irritation May cause an allergic skin reaction Causes serious eye irritation Harmful if inhaled May cause allergy or asthma symptoms or breathing difficulties if inhaled May cause respiratory irritation
<b>5. Fire-fighting measures</b>	
Suitable extinguishing agents	Water spray, foam, CO <sub>2</sub> , dry chemical powder.
Special hazards caused by the material, its products of combustion or flue gases	Can be released in case of fire: Carbon oxide, Nitrogen oxides, hydrogen chloride gas.
Protective equipment for fire-fighters	Self-contained breathing apparatus, full protective clothing, protective clothing and face mask, rubber gloves.
<b>6. Accidental release measures</b>	
Person-related safety precautions	Ensure adequate ventilation. Avoid dust formation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering. Keep unnecessary personnel away.
Measures for environmental protection	Prevent further leakage or spillage if safe to do so. Do not allow material to be released to the environment without proper governmental permits.
Measures for cleaning/collecting	Collect in a dry, clean, covered container with clean shovel. Clean contaminated surface thoroughly.
Additional information	See Section 7 for information on safe handling See section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

**7. Handling and storage**

**Handling**

Information for safe handling

Wear rubber gloves, protective overalls on infiltration and respirator.

Avoid contact with skin, eyes, mucous membranes and clothing. Avoid formation of dust and aerosols.

Ensure adequate ventilation.

In case of insufficient ventilation, wear suitable respiratory equipment if ingested.

Avoid inhalation of dust and smoke.

Information about protection against explosions and fires

Keep away from heat, sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

**STORAGE**

Requirements to be met by storerooms and containers

Keep in a cool, dry, well-ventilated place.

Keep tightly closed until used.

Information about storage in one common storage facility

Store away from incompatible substances such as oxidizing agents, acids and alkali.

keep away from food chemicals.

Protect from heat and dampness.

Inflated preservation is sensitive to humidity.

Further information about storage conditions

No data

**8. Exposure controls/personal protection**

Limit Values for Exposure

**Component**

CAS number	ACGIH TLV-TWA	ACGIH TLV-STEL	NIOSH REL-TWA	NIOSH REL-STEL
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3,4-Dichlorophenyl isocyanate

102-36-3	N.E.	N.E.	N.E.	N.E.
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Appropriate engineering controls

Use adequate ventilation to keep airborne concentrations low. Facilities storing or utilizing this material should be equipped with an eyewash and a safety shower facility.

General protective and hygienic measures

Do not get this material in contact with skin. Do not get this material on clothing. Avoid contact with eyes. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

No smoking, eating and drinking in workplace.

Timely change of clothing.

Personal protective equipment

Safety glasses, rubber gloves, protective overalls on infiltration and a dust respirator.

Breathing equipment

When workers are facing high concentrations they must use appropriate certified respirators.

Protection of hands	Wear appropriate chemical resistant gloves.
Eye/Face protection	Use safety glasses with side shields or safety goggles as mechanical barrier for prolonged exposure.
Body protection	Full set of anti chemical reagent overalls, choose body protection according to the amount and concentration of the dangerous substance at the work place.

Note: 1. N.E. means not established.

### 9. Physical and chemical properties

Physical state	Solid
Colour	White to light brown
Odour	No data available.
Melting point/freezing point	41-43 °C (760mmHg) -lit
Boiling point and boiling range	118-120 °C (24 hPa) -lit
Flammability	Nonflammable
Upper/lower flammability or explosive limits	No data available.
Flash point	123°C (C.C.)
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
pH	Not applicable
Kinematic viscosity	Not applicable
Solubility(water)	No data available.
Partition coefficient: n-octanol/water	No data available.
Vapour pressure	0.2mmHg (20°C) 1.5mmHg (55°C)
Vapour density(air=1)	No data available.
Density/Relative density	No data available.
Particle characteristics	No data available

### 10. Stability and reactivity

Reactivity	No data available
Chemical stability	This is a stable chemical under recommended storage conditions.
Possibility of hazardous reactions	In the case of fire, it will decompose into harmful substances. - Carbon oxide, Nitrogen oxides, hydrogen chloride gas.
Conditions to avoid (e.g. static discharge, shock or vibration)	Heating.
Incompatible materials	Avoid contact with strong oxidants, acids and alkali.
Hazardous decomposition products	May include carbon oxides, Nitrogen oxides, hydrogen chloride gases.

### 11. Toxicological information

Routes of Entry: Dermal contact, eye contact, inhalation, ingestion.

**Acute Toxicity**

3,4-Dichlorophenyl isocyanate (CAS 102-36-3)	LD50 (Oral, rat) : 91 mg/kg
	LD50 (Dermal, rat) : N/A
	LC50 (Inhalation, rat) : 2,700 mg/m <sup>3</sup> (4h)

Skin corrosion/Irritation Causes skin irritation

Serious eye damage/irritation Causes serious eye irritation

Respiratory or skin sensitization May cause an allergic skin reaction  
 May cause allergy or asthma symptoms or breathing difficulties if inhaled

Germ cell mutagenicity Not classified

Carcinogenicity Not classified

Reproductive toxicity Not classified

STOT-single exposure May cause respiratory irritation

STOT-repeated exposure Not classified

Aspiration hazard Not classified

Chronic Effects Not classified

Further Information No data

### 12. Ecological information

**Ecotoxicity**

Aquatic Toxicity	3,4-Dichlorophenyl isocyanate (CAS 102-36-3)
	Test & Species
	96 Hr LC50 fish: N/A
	48 Hr EC50 Daphnia: N/A
	72 Hr EC50 Algae: N/A

Persistence and degradability Not available

Bioaccumulative potential Not available

Mobility in soil Not available

Additional Information Not available

### 13. Disposal considerations

**WASTE DISPOSAL INSTRUCTIONS**

Contact a qualified professional waste disposal service to dispose of this material.

Dispose of in accordance with local environmental regulations or local authority requirements.

### 14. Transport information

The Recommendation of Transport of Dangerous Goods(TDG)

UN Number UN 2250

Proper Shipping Name	DICHLOROPHENYL ISOCYANATES
Class/Division	Division 6.1 Toxic Substances
Package Group	PG II
Subsidiary risk	None
labelling pictogram	



Maritime transport IMDG /Marine pollutant (Yes/No)	Being same with TDG/No
Air transport ICAO-TI and IATA-DGR	Being same with TDG

### 15. Regulatory information

#### European/International Regulations

**OSHA:** Hazardous by definition of Hazard Communication Standard(29CFR 1910.1200).

**EINECS Status:** 3,4-Dichlorophenyl isocyanate (CAS 102-36-3) is included in EINECS inventory.

**EPA TSCA Status:** 3,4-Dichlorophenyl isocyanate (CAS 102-36-3) is included in TSCA public inventory.

**Canadian DSL(Domestic Substances List):** 3,4-Dichlorophenyl isocyanate (CAS 102-36-3) is included in DSL.

**HMIS(Hazardous Material Identification System Ratings):** Health: 3  
Flammability: 1  
Physical hazard: 1  
Personal protection: F  
(4. Severe Hazard; 3. Serious Hazard; 2. Moderate Hazard; 1. Slight Hazard; 0. Minimal Hazard)

**WHMIS(Canadian Workplace Hazardous Material Identification System Ratings):** Not listed.

**GB 12268-2012 List of dangerous goods** This chemical is a dangerous goods on the GB 12268-2012 list of dangerous goods.

### 16. other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.



This Material Safety Data Sheet was based on the "Globally Harmonized System of Classification and Labelling of Chemicals", "Recommendations on the TRANSPORT OF DANGEROUS GOODS Model Regulations", "INTERNATIONAL MARITIME DANGEROUS GOODS CODE", "International Air Transport Association Dangerous Goods Regulations", the National Standards and other related dangerous chemicals management laws, regulations and standards, which are periodically updated and changed. To make dangerous goods / hazardous chemicals comply with the relevant requirements of the latest management, regularly update is recommended.

This Material Safety Data Sheet has been compiled in both English and Chinese. For any discrepancies, the Chinese version shall prevail.

<b>Abbreviations and acronyms</b>	<p>ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road</p> <p>RID: Regulations Concerning the International Transport of Dangerous Goods by Rail</p> <p>IMDG: International Maritime Code for Dangerous Goods</p> <p>IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)</p> <p>ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)</p> <p>EINECS: European Inventory of Existing Commercial Chemical Substances</p> <p>CAS: Chemical Abstracts Service</p> <p>LC50: Lethal concentration, 50 percent</p> <p>LD50: Lethal dose, 50 percent</p> <p>EC50: Effective concentration, 50 percent</p>
<b>Edit Date</b>	11.01.2021
<b>Update and Revise</b>	Original edition
<b>Edit Standard</b>	<i>Globally Harmonized System of Classification and Labelling for Chemicals</i> Part 1.5
<b>Revised Institution</b>	Technology Center of Hangzhou Customs District