Chemical Safety Data Sheet MSDS / SDS

2-chloro-N-(ethoxymethyl)-N-(2-ethyl-6-methylphenyl)acetamide SDS

Revision Date:2024-04-25 Revision Number:1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Product name: 2-chloro-N-(ethoxymethyl)-N-(2-ethyl-6-methylphenyl)acetamide

CAS: 34256-82-1

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: For R&D use only. Not for medicinal, household or other use.

Uses advised against: none

Company Identification

Company: Chemicalbook.in

Address: 5 vasavi Layout Basaveswara Nilayam Pragathi Nagar Hyderabad, India -500090

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SECTION 2: Hazards identification

Classification of the substance or mixture

Skin irritation, Category 2
Skin sensitization, Category 1

Acute toxicity - Category 4, Inhalation
Specific target organ toxicity – single exposure, Category 3
Carcinogenicity, Category 2
Specific target organ toxicity – repeated exposure, Category 2
Hazardous to the aquatic environment, short-term (Acute) - Category Acute 1
Hazardous to the aquatic environment, long-term (Chronic) - Category Chronic 1
Reproductive toxicity, Category 2

GHS label elements, including precautionary statements

Pictogram(s)

Signal word Warning

Hazard statement(s)

H315 Causes skin irritation
H317 May cause an allergic skin reaction
H332 Harmful if inhaled
H335 May cause respiratory irritation
H351 Suspected of causing cancer
H373 May cause damage to organs through prolonged or repeated exposure
H410 Very toxic to aquatic life with long lasting effects

Precautionary statement(s)

Prevention

P264 Wash ... thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P272 Contaminated work clothing should not be allowed out of the workplace.
P271 Use only outdoors or in a well-ventilated area.
P203 Obtain, read and follow all safety instructions before use.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P273 Avoid release to the environment.

Response

P302+P352 IF ON SKIN: Wash with plenty of water/...
P321 Specific treatment (see ... on this label).

P332+P317 If skin irritation occurs: Get medical help.
P362+P364 Take off contaminated clothing and wash it before reuse.
P333+P317 If skin irritation or rash occurs: Get medical help.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P317 Get medical help.
P319 Get medical help if you feel unwell.
P318 IF exposed or concerned, get medical advice.
P391 Collect spillage.

Storage

P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

Disposal

P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Other hazards which do not result in classification

no data available

SECTION 3: Composition/information on ingredients

Substance

Chemical name:	2-chloro-N-(ethoxymethyl)-N-(2-ethyl-6-methylphenyl)acetamide
Common names and synonyms:	2-chloro-N-(ethoxymethyl)-N-(2-ethyl-6-methylphenyl)acetamide
CAS number:	34256-82-1
EC number:	251-899-3
Concentration:	100%

SECTION 4: First aid measures

Description of necessary first-aid measures

If inhaled

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

Following skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

Following eye contact

Rinse with pure water for at least 15 minutes. Consult a doctor.

Following ingestion

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

Most important symptoms/effects, acute and delayed

no data available

Indication of immediate medical attention and special treatment needed, if necessary

Skin decontamination: Skin contamination should he treated promptly by washing with soap and water. Contamination of the eyes should be treated immediately by prolonged flushing of the eyes with large amounts of clean water. If dermal or ocular irritation persists, medical attention should be, obtained without delay. Herbicides

SECTION 5: Firefighting measures

Suitable extinguishing media

Wear self-contained breathing apparatus (SCBA) and full protective equipment. Dupont Breakfree Herbicide

Specific hazards arising from the chemical

no data available

Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing mist, gas or vapours.Avoid contacting with skin and eye. Use personal protective equipment.Wear chemical impermeable gloves. Ensure adequate ventilation.Remove all sources of ignition. Evacuate personnel to safe areas.Keep people away from and upwind of spill/leak.

Environmental precautions

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up

Do not contaminate /receiving/ water when disposing of equipment washwaters or rinsate. DuPont Breakfree Herbicide

SECTION 7: Handling and storage

Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

Conditions for safe storage, including any incompatibilities

Store in original container only. Keep container closed when not in use. Do not store near food or feed. DuPont Breakfree Herbicide

SECTION 8: Exposure controls/personal protection

Control parameters

Occupational Exposure limit values

no data available

Biological limit values

no data available

Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

Skin protection

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Respiratory protection

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

Thermal hazards

no data available

SECTION 9: Physical and chemical properties and safety characteristics

Physical state:	Oily liquid at room temperature, light amber to violet color. Aromatic odor.
Colour:	Clear, viscous liquid
Odour:	Aromatic odor
Melting point/freezing point:	<0°C
Boiling point or initial boiling point and boiling range:	391.5°C at 760 mmHg
Flammability:	no data available

Lower and upper explosion limit/flammability limit:	no data available
Flash point:	>68°C
Auto-ignition temperature:	no data available
Decomposition temperature:	no data available
pH:	no data available
Kinematic viscosity:	no data available
Solubility:	In water, 233 mg/L at 25 deg C
Partition coefficient n-octanol/water:	log Kow = 4.14
Vapour pressure:	2.2X10-2 mPa /1.67X10-7 mm Hg/ at 20 deg C
Density and/or relative density:	1.1
Relative vapour density:	no data available
Particle characteristics:	no data available

SECTION 10: Stability and reactivity

Reactivity

no data available

Chemical stability

Stable for over 2 years at 20 deg C (EC formulation)

Possibility of hazardous reactions

no data available

Conditions to avoid

no data available

Incompatible materials

no data available

Hazardous decomposition products

When heated to decomposition it emits toxic vapors of /nitrogen oxides and hydrogen chloride/.

SECTION 11: Toxicological information

Acute toxicity

Oral: LD50 Rat oral 1929 mg/kg bw

Inhalation: LC50 Rat inhalation 3.99 mg/L/4 hr

Dermal: no data available

Skin corrosion/irritation

no data available

Serious eye damage/irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

Cancer Classification: Likely to be Carcinogenic to Humans

Reproductive toxicity

no data available

STOT-single exposure

no data available

STOT-repeated exposure

no data available

Aspiration hazard

no data available

SECTION 12: Ecological information

Toxicity

Toxicity to fish: LC50; Species: Lepomis macrochirus (Bluegill); Conditions: freshwater, static; Concentration: 1300 ug/L for 96 hr (95% confidence interval: 1000-1800 ug/L) /95.6% pure formulation

Toxicity to daphnia and other aquatic invertebrates: EC50; Species: Daphnia magna (Water Flea) age <24 hr; Conditions: freshwater, static; Concentration: 14000 ug/L for 48 hr (95% confidence interval: 10000-18000 ug/L); Effect: intoxication, immobilzation /91.3% pure formulation

Toxicity to algae: EC50; Species: Anabaena flosaquae (Blue-Green Algae); Conditions: freshwater, static; Concentration: 35000 ug/L for 5 days (95% confidence interval: 31000-39000 ug/L); Effect: population abundance /95.1% pure formulation

Toxicity to microorganisms: no data available

Persistence and degradability

AEROBIC: Degradation rates of 14C-labeled acetochlor in sandy loam soils from Eastern Virginia were found to range from 8 to 15% of applied concentration over a period of 48 days(1). In sewage sludge the overall degradation rate constant and half-life were determined to be 0.0403 per hour and 17.2 hours, respectively, while in soil the overall degradation rate constant and half-life

were determined to be 0.1601 per day and 4.3 days, respectively(2). Using a soil inoculum from an agricultural field of Northwestern Beijing, China (pH 8.4; 1.5% organic carbon; cation exchange capacity 84.0 mmol/100 g; 59% silt; 38% sand; 3% clay), a half-life of 4.6 days was reported following 35 days incubation; acetochlor was added at a concentration of 10 mg/kg(3). Acetochlor at a concentration of 1 mg/kg exhibited 6.7% and 23.9% mineralization after 58 and 90 days in neoluvisol and calcosol soils, respectively, under laboratory conditions. Soil characteristics were as follows: Neoluvisol - 15.4% sand; 66.0% silt; 18.6% clay; 14.80% organic carbon; pH 7.47; cation exchange capacity: 12.3 cmol/kg; water content: 16.6 cu cm/100 cu cm. Calcosol - 14.7% sand; 57.1% silt; 23.9% clay; 16.21% organic carbon; pH 8.05; cation exchange capacity: 18.6 cmol/kg; water content: 14.7 cu cm/100 cu cm. First-order degradation rate constants in neoluvisol maintained at 25 and 15 deg C were 0.14/day and 0.05/day, respectively, corresponding to half-lives of 5.1 and 14.9 days, respectively. First-order degradation rate constants in calcosol maintained at 25 and 15 deg C were 0.20/day and 0.11/day, respectively, corresponding to half-lives of 3.5 and 6.3 days, respectively(4).

Bioaccumulative potential

An estimated BCF of 250 was calculated in fish for acetochlor(SRC), using a log Kow of 4.14(1) and a regression-derived equation(2). According to a classification scheme(3), this BCF suggests the potential for bioconcentration in aquatic organisms is high(SRC), provided the compound is not metabolized by the organism(SRC).

Mobility in soil

The Koc of acetochlor has been reported as 98.5(1), 239(2), log 2.30 (Koc = 199)(3), and 165(4). Using a silty clay loam, a Koc of 335 was reported(5). According to a classification scheme(6), this range of Koc values suggests that acetochlor is expected to have high to moderate mobility in soil. The leaching potential of acetochlor was assessed to be marginal based on a Koc value of 165 mL/g and a half-life in soil of 12 days(4). Freundlich adsorption coefficients of 7.9 and 4.8 were reported using Chinese agricultural soils - Beijing (pH 8.4; 1.5% organic carbon; cation exchange capacity 84 mmol/100 g; 59% sand; 38% silt; 3% clay) and Hebei (pH 7.7; 0.8% organic carbon; cation exchange capacity 215.4 mmol/100 g; 73% sand; 22% silt; 5% clay)(7). Using a soil inoculum from an agricultural field of Northwestern Beijing, China (pH 8.4; 1.5% organic carbon; cation exchange capacity 84.0 mmol/100 g; 59% silt; 38% sand; 3% clay), a mean Freundlich adsorption coefficient of 4.339 L/kg was measured(8).

Other adverse effects

no data available

SECTION 13: Disposal considerations

Disposal methods

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas

scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

SECTION 14: Transport information

UN Number

ADR/RID: UN3082 (For reference only, please check.)
IMDG: UN3082 (For reference only, please check.)
IATA: UN3082 (For reference only, please check.)

UN Proper Shipping Name

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (For reference only, please check.)
IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (For reference only, please check.)
IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (For reference only, please check.)

Transport hazard class(es)

ADR/RID: 9 (For reference only, please check.)
IMDG: 9 (For reference only, please check.)
IATA: 9 (For reference only, please check.)

Packing group, if applicable

ADR/RID: III (For reference only, please check.)
IMDG: III (For reference only, please check.)
IATA: III (For reference only, please check.)

Environmental hazards

ADR/RID: Yes
IMDG: Yes
IATA: Yes

Special precautions for user

no data available

Transport in bulk according to IMO instruments

no data available

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

European Inventory of Existing Commercial Chemical Substances (EINECS)

Listed.

EC Inventory

Listed.

United States Toxic Substances Control Act (TSCA) Inventory

Not Listed.

China Catalog of Hazardous chemicals 2015

Listed.

New Zealand Inventory of Chemicals (NZIoC)

Listed.

(PICCS)

Not Listed.

Vietnam National Chemical Inventory

Listed.

IECSC)

Listed.

Korea Existing Chemicals List (KECL)

Not Listed.

SECTION 16: Other information

Abbreviations and acronyms

CAS: Chemical Abstracts Service

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

IMDG: International Maritime Dangerous Goods

IATA: International Air Transportation Association

TWA: Time Weighted Average

STEL: Short term exposure limit

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

EC50: Effective Concentration 50%

References

IPCS - The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home

HSDB - Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm

IARC - International Agency for Research on Cancer, website: http://www.iarc.fr/

eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en

CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple

ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp

ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg

Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp

ECHA - European Chemicals Agency, website: https://echa.europa.eu/

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