Acetone thiosemicarbazone

• (Propan-2-ylideneamino)thiourea

Formula $C_4H_9N_3S$

Structure

$$H_3C$$
 C
 N
 N
 C
 NH_2
 CH_3

Registry Numbers and Inventories.

CAS 1752-30-3

NIH PubChem CID 2770166

EC

(EINECS/ELINCS) 217-137-9

EC Risk Phrase R 21 25 26

EC Safety Phrase S 22 28 36/37/39 45

RTECS AL7350000

RTECS class Agricultural Chemical and Pesticide

UN (DOT) 2811

Beilstein/Gmelin 1754301

Beilstein Reference 4-03-00-00377

Swiss Giftliste 1 G-7244

Canada DSL/NDSL DSL

US TSCA Listed

Japan ENCS (MITI) Listed

Properties.

Formula C4H9N3S

Formula mass 131.199999999999

Melting point, °C 196

Partition coefficient,

.12

 pK_{ow}

Hazards and Protection.

Protection Wear appropriate protective gloves, clothing and goggles.

Respirators Wear positive pressure self-contained breathing apparatus (SCBA).

> ELIMINATE all ignition sources. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Stop leak if you can do it without risk. Absorb or cover with dry Small spills/leaks

> earth, sand or other non-combustible material and transfer to containers. DO NOT GET WATER INSIDE CONTAINERS.

Fire.

Extinguish using agent most appropriate for surrounding fire. Fire fighting

Non-combustible, substance itself does not burn but may decompose Fire potential

upon heating to produce corrosive and/or toxic fumes.

Hazards Contact with metals may evolve flammable hydrogen gas.

Combustion products

Fire may produce irritating, corrosive and/or toxic gases.

Health.

2 **Poison Class**

Exposure effects

See Inhalation. **Ingestion**

TOXIC; inhalation, ingestion, or skin contact with material may cause

Inhalation severe injury or death. Effects of contact or inhalation may be

delayed.

Contact with molten substance may cause severe burns to skin and Skin

eyes. See Inhalation.

Eyes See Inhalation.

First aid

Inhalation

Ingestion Seek medical assistance.

> Move victim to fresh air. Apply artificial respiration if victim is not breathing. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a

pocket mask equipped with a one-way valve or other proper

respiratory medical device. Administer oxygen if breathing is

difficult.

Remove and isolate contaminated clothing and shoes. Immediately Skin

flush with running water for at least 20 minutes. For minor skin

contact, avoid spreading material on unaffected skin.

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154 Substances Toxic and/or Corrosive (Non-Combustible)

POTENTIAL HAZARDS

HEALTH

- **TOXIC**; inhalation, ingestion, or skin contact with material may cause severe injury or death.
- Contact with molten substance may cause severe burns to skin and eyes.
- · Avoid any skin contact.
- Effects of contact or inhalation may be delayed.
- Fire may produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.

FIRE OR EXPLOSION

- Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.
- Some are oxidizers and may ignite combustibles (wood, paper, oil, clothing, etc.).
- Contact with metals may evolve flammable hydrogen gas.
- Containers may explode when heated.

PUBLIC SAFETY

- CALL Emergency Response Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.
- Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions.
- Keep unauthorized personnel away.
- Stay upwind.
- · Keep out of low areas.

Ventilate enclosed areas.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.

EVACUATION

See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Fire

If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE

Small Fires

Dry chemical, CO2 or water spray.

Large Fires

- Dry chemical, CO2, alcohol-resistant foam or water spray.
- Move containers from fire area if you can do it without risk.
- Dike fire control water for later disposal; do not scatter the material.

Fire involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Do not get water inside containers.
- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- Prevent entry into waterways, sewers, basements or confined areas.
- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
- DO NOT GET WATER INSIDE CONTAINERS.

FIRST AID

- · Move victim to fresh air.
- Call 911 or emergency medical service.
- · Apply artificial respiration if victim is not breathing.
- Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- For minor skin contact, avoid spreading material on unaffected skin.
- Keep victim warm and quiet.* Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.
- Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

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