Dimethylamino-2-propanol 77%

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 SDS Number:
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SECTION 1. IDENTIFICATION

Product name

: Dimethylamino-2-propanol 77%

Product code : P5120910

Manufacturer or supplier's details

Company name of supplier

: Taminco US LLC

A Subsidiary of Eastman Chemical Company

Address : 200 South Wilcox Drive

Kingsport TN 37660

Telephone : (423) 229-2000

Emergency telephone : CHEMTREC: +1-800-424-9300, +1-703-527-3887 CCN7321

Recommended use of the chemical and restrictions on use

Recommended use

: Chemical intermediate

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with 29 CFR 1910.1200

Flammable liquids : Category 3

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 3

Acute toxicity (Dermal) : Category 4

Skin corrosion : Category 1B

Serious eye damage : Category 1

GHS label elements

Hazard pictograms :





Signal Word : Danger

Hazard Statements : H226 Flammable liquid and vapor.

H302 + H312 Harmful if swallowed or in contact with skin.

H314 Causes severe skin burns and eye damage.

H331 Toxic if inhaled.

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Precautionary Statements

Prevention:

P210 Keep away from heat/sparks/open flames/hot surfaces.

No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

P363 Wash contaminated clothing before reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

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

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components

Chemical name	CAS-No.	Concentration (% w/w)
N,N-Dimethylisopropanolamine	108-16-7	77

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SECTION 4. FIRST AID MEASURES

If inhaled : Move to fresh air.

If breathing is difficult, give oxygen.
If not breathing, give artificial respiration.

Call a physician or poison control center immediately.

In case of skin contact : Wash off immediately with soap and plenty of water while

removing all contaminated clothes and shoes. Wash contaminated clothing before re-use.

Call a physician or poison control center immediately.

Thoroughly clean shoes before reuse.

In case of eye contact : In case of contact, immediately flush eyes with plenty of water

for at least 15 minutes.

If easy to do, remove contact lens, if worn.

Call a physician or poison control center immediately.

If swallowed : Seek medical advice.

Do not induce vomiting without medical advice.

Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and

delayed

Harmful if swallowed or in contact with skin.

Causes serious eye damage.

Toxic if inhaled.

Causes severe burns.

Irritation Pain Redness

Notes to physician : Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Carbon dioxide (CO2)

Dry chemical Water spray

Unsuitable extinguishing

media

Water spray jet

Specific hazards during fire

fighting

Water may be ineffective.

The product will float on water and can be reignited on surface

water.

Hazardous combustion prod-

ucts

No hazardous combustion products are known

Further information : Use water spray to cool unopened containers.

Special protective equipment:

for fire-fighters

Wear an approved positive pressure self-contained breathing

apparatus in addition to standard fire fighting gear.

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SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

: Wear appropriate personal protective equipment.

Local authorities should be advised if significant spillages

cannot be contained.

Environmental precautions : Avoid release to the environment.

Methods and materials for containment and cleaning up

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite)

and transfer to a container for disposal according to local /

national regulations (see section 13). After cleaning, flush away traces with water. Eliminate all ignition sources if safe to do so.

SECTION 7. HANDLING AND STORAGE

Advice on protection against :

fire and explosion

None known.

Advice on safe handling : Do not breathe vapors or spray mist.

Do not get on skin or clothing.

Do not get in eyes. Do not swallow.

Ensure adequate ventilation. Wash thoroughly after handling. Keep away from fire (No Smoking).

Keep away from fire, sparks and heated surfaces.

Do not use sparking tools.

Conditions for safe storage : Keep container closed when not in use.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : Good general ventilation (typically 10 air changes per hour)

should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne

levels to an acceptable level.

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Personal protective equipment

Respiratory protection : Use respiratory protection unless adequate local exhaust

ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Hand protection

Remarks : Wear suitable gloves.

Eye protection : Safety glasses

Protective measures : Remove respiratory and skin/eye protection only after vapors

have been cleared from the area.

Ensure that eye flushing systems and safety showers are

located close to the working place.

Use personal protective equipment as required.

Hygiene measures : Handle in accordance with good industrial hygiene and safety

practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Odor Threshold : not determined

Melting point/range : $< -71 \, ^{\circ}\text{F} \, / < -57 \, ^{\circ}\text{C}$

Boiling point/boiling range : 205 °F / 96 °C

Flash point : 99 °F / 37 °C

Method: closed cup

Upper explosion limit / Upper

flammability limit

not determined

Lower explosion limit / Lower

flammability limit

not determined

Vapor pressure : 27 hPa (68 °F / 20 °C)

Relative vapor density : 3.6

(Air = 1.0)

Relative density : 0.92

Density : 0.92 g/cm3

Solubility(ies)

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Water solubility : soluble

Partition coefficient: n-

octanol/water

: log Pow: -0.12

Autoignition temperature : not determined

Viscosity

Viscosity, dynamic

3 mPa,s

Explosive properties : No data available

Oxidizing properties : Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Stable

Chemical stability : Stable under normal conditions.

Possibility of hazardous reac-

tions

Stable

Hazardous decomposition products formed under fire

conditions.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Oxidizing agents

Hazardous decomposition

products

Carbon dioxide (CO2)
Carbon monoxide

Nitrogen oxides (NOx)

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Harmful if swallowed or in contact with skin.

Toxic if inhaled.

Product:

Acute oral toxicity

: Acute toxicity estimate: 1,767 mg/kg

Method: Calculation method

Remarks: Harmful if swallowed. Causes digestive tract burns.

Acute inhalation toxicity : Acute toxicity estimate: 3.9 mg/l

Exposure time: 4 h
Test atmosphere: vapor

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Method: Calculation method

Remarks: Irritating to respiratory system.

Acute dermal toxicity : Acute toxicity estimate: 1,600 mg/kg

Method: Calculation method

Remarks: No significant adverse effects were reported

Components:

Dimethylamino-2-propanol:

Acute oral toxicity

: LD50 (Rat): 1,360 mg/kg

Acute inhalation toxicity : LC50 (Rat): 3 mg/l

Exposure time: 4 h
Test atmosphere: vapor

Acute dermal toxicity : LD50 (Rabbit): 1,232 mg/kg

Skin corrosion/irritation

Causes severe burns.

Product:

Remarks : Causes severe skin burns.

Components:

Dimethylamino-2-propanol:

Result : Corrosive after 3 minutes to 1 hour of exposure

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Remarks : Causes serious eye damage.

Components:

Dimethylamino-2-propanol:

Result : Corrosive

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Components:

Dimethylamino-2-propanol:

Remarks : May cause sensitization of susceptible persons.

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Germ cell mutagenicity

Not classified based on available information.

Components:

Dimethylamino-2-propanol:

Germ cell mutagenicity -

Did not show mutagenic effects in animal experiments.

Assessment

Carcinogenicity

Not classified based on available information.

Components:

Dimethylamino-2-propanol:

Carcinogenicity - Assess-

No evidence of carcinogenicity in animal studies.

ment

IARC No ingredient of this product present at levels greater than or equal to 0.1% is

identified as probable, possible or confirmed human carcinogen by IARC.

OSHANo component of this product present at levels greater than or equal to 0.1% is

on OSHA's list of regulated carcinogens.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is

identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Not classified based on available information.

Components:

Dimethylamino-2-propanol:

Reproductive toxicity - As- : No toxicity to reproduction

sessment Did not show teratogenic effects in animal experiments.

STOT-single exposure

Not classified based on available information.

Components:

Dimethylamino-2-propanol:

Remarks : No significant adverse effects were reported

STOT-repeated exposure

Not classified based on available information.

Components:

Dimethylamino-2-propanol:

Remarks : No significant adverse effects were reported

Aspiration toxicity

Not classified based on available information.

Product:

No data available

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No aspiration toxicity classification

Further information

Product:

Remarks : None known.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Dimethylamino-2-propanol:

Toxicity to fish

LC50 (Leuciscus idus (Golden orfe)): 148 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

LC50 (Daphnia): 79 mg/l Exposure time: 48 h

Toxicity to algae/aquatic

plants

EC50 (Desmodesmus subspicatus (green algae)): 77.4 mg/l

Exposure time: 72 h

Persistence and degradability

Components:

Dimethylamino-2-propanol:

Biodegradability

Result: Readily biodegradable.

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of in accordance with local regulations.

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

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UN/ID No. : UN 2734

Proper shipping name : Amines, liquid, corrosive, flammable, n.o.s.

(Dimethylamino-2-propanol)

Class : 8
Subsidiary risk : 3
Packing group : II

Labels : Class 8 - Corrosive substances, Class 3 - Flammable liquids

Packing instruction (cargo : 855

aircraft)

Packing instruction (passen: 851

ger aircraft)

IMDG-Code

UN number : UN 2734

Proper shipping name : AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S.

(Dimethylamino-2-propanol)

Class : 8
Subsidiary risk : 3
Packing group : II
Labels : 8 (3)
EmS Code : F-E, S-C
Marine pollutant : no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

49 CFR

UN/ID/NA number : UN 2734

Proper shipping name : Amines, liquid, corrosive, flammable n.o.s.

(Dimethylamino-2-propanol)

Class : 8
Subsidiary risk : 3
Packing group : II

Labels : Class 8 - Corrosive substances, Class 3 - Flammable liquids

ERG Code : 132 Marine pollutant : no

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

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SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards

: Flammable (gases, aerosols, liquids, or solids)

Acute toxicity (any route of exposure)

Skin corrosion or irritation

Serious eye damage or eye irritation

SARA 313 : This material does not contain any chemical components with

known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:

TCSI

: On the inventory, or in compliance with the inventory

TSCA : All substances listed as active on the TSCA inventory

AICS : On the inventory, or in compliance with the inventory

DSL : All components of this product are on the Canadian DSL

ENCS : On the inventory, or in compliance with the inventory

ISHL : On the inventory, or in compliance with the inventory

KECI: On the inventory, or in compliance with the inventory

PICCS : On the inventory, or in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

NZIoC : Not listed

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Further information

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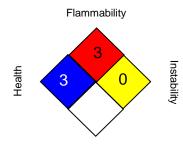
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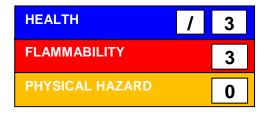
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NFPA 704:



Special hazard

HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC -International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization: IECSC - Inventory of Existing Chemical Substances in China: IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG -United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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