We create chemistry

Safety data sheet

1. Substance/preparation and manufacturer/supplier identification

Product name:
TRIDECANOL N (ASIA)

Use: Chemical

Manufacturer/supplier:
BASF (Thai) Limited
23rd Floor, Emporium Tower, 622, Sukhumvit 24 Rd.,
Klongton, Klongtoey, Bangkok 10110, THAILAND
Telephone: +66 2624-1999
Telefax number: +66 2664-9254
E-mail address: Thailand-SDS-info@basf.com

Emergency information:
International emergency number:
Telephone: +49 180 2273-112

2. Hazard identification

Classification according to UN GHS 2009

Classification of the substance and mixture:
Skin corrosion/irritation: Cat.2
Hazardous to the aquatic environment - acute: Cat.1
Hazardous to the aquatic environment - chronic: Cat.1

M-factor acute: 1
M-factor chronic: 1

Label elements and precautionary statement:

Pictogram:

Signal Word:
Warning

Hazard Statement:

H315	Causes skin irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P273	Avoid release to the environment.
P280	Wear protective gloves.
P264	Wash contaminated body parts thoroughly after handling.

Precautionary Statements (Response):

P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P391	Collect spillage.
P332 + P313	If skin irritation occurs: Get medical attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.

Precautionary Statements (Disposal):

P501	Dispose of contents and container to hazardous or special waste collection point.

Other hazards which do not result in classification:
If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.
See section 12 - Results of PBT and vPvB assessment.

3. Composition/information on ingredients

Chemical nature

Substance nature: Substance

isotridecan-1-ol

Hazardous ingredients

isotridecan-1-ol

Content (W/W): >= 99.9 % - <= 100 % CAS Number: 27458-92-0	Skin Corr./Irrit.: Cat. 2 Aquatic Acute: Cat. 1 Aquatic Chronic: Cat. 1 M-factor acute: 1 M-factor chronic: 1

4. First-Aid Measures

General advice:
Remove contaminated clothing.

If inhaled:
Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:
Immediately wash thoroughly with soap and water, seek medical attention.

On contact with eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion:
Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Note to physician:
Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.
Hazards: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11. (Further) symptoms and / or effects are not known so far
Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Suitable extinguishing media:
dry powder, water spray, carbon dioxide, foam

Unsuitable extinguishing media for safety reasons:
water jet

Additional information:
Use extinguishing measures to suit surroundings.

Specific hazards:
The product is combustible. Cool endangered containers with water-spray. See SDS section 7 - Handling and storage.

Special protective equipment:
Wear a self-contained breathing apparatus. Special protective equipment for firefighters

Further information:
Evacuate area of all unnecessary personnel. Fight fire from maximum distance.

Further information:
Extend fire extinguishing measures to the surroundings. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental Release Measures

Personal precautions:
Handle in accordance with good industrial hygiene and safety practice.

Avoid contact with the skin, eyes and clothing.

Take off immediately all contaminated clothing.

Environmental precautions:
Discharge into the environment must be avoided.

Methods for cleaning up or taking up:
Pick up with suitable appliance and dispose of. Spills should be contained, solidified, and placed in suitable containers for disposal. Dispose of absorbed material in accordance with regulations.

Additional information: High risk of slipping due to leakage/spillage of product.

Shut off or stop source of leak. Shut off or stop released substance/product under safe conditions.

Pack in tightly closed containers for disposal.

7. Handling and Storage

Handling

Handle in accordance with good industrial hygiene and safety practice.

Protection against fire and explosion:
No special precautions necessary. Substance/product is non-flammable.

Storage

Further information on storage conditions: Containers should be stored tightly sealed in a dry place.

8. Exposure controls and personal protection

Components with occupational exposure limits

No substance specific occupational exposure limits known.

Personal protective equipment

Respiratory protection:
Wear respiratory protection if ventilation is inadequate. Gas filter for gases/vapours of organic compounds (boiling point >65 °C, e. g. EN 14387 Type A)

Hand protection:
Suitable chemical resistant safety gloves (EN ISO 374-1) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc. Manufacturer's directions for use should be observed because of great diversity of types.
Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.

Eye protection:
Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:
Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures:
Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is required additionally to the stated personal protection equipment.

9. Physical and Chemical Properties

Form:	slightly viscous, oily	
Colour:	colourless, clear	
Odour:	almost odourless almost odourless	
Odour threshold:	not determined	
pH value:	not applicable	
Melting point:	-78 °C	(DTA)
Boiling point:	260.8 °C (1,013 hPa)	(other)
Flash point:	128 °C	(ISO 2719)
Evaporation rate:	Value can be approximated from Henry's Law Constant or vapor pressure.	
Flammability (solid/gas):	hardly combustible	(derived from flash point)

Lower explosion limit:	For liquids not relevant for classification and labelling., The lower explosion point may be 5 - 15 °C below the flash point.	
Upper explosion limit:	For liquids not relevant for classification and labelling.	
Ignition temperature:	230 °C	(DIN 51794)
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.	
Self ignition:	Based on its structural properties the product is not classified as self-igniting.	Test type: Spontaneous self-ignition at room-temperature.
Self heating ability:	not applicable, the product is a liquid	
SADT:	Study scientifically not justified. Not a substance/mixture liable to self-decomposition according to GHS.	
Explosion hazard:	Based on the chemical structure there is no indication of explosive properties.	
Fire promoting properties:	Based on its structural properties the product is not classified as oxidizing.	
Vapour pressure:	< 0.01 hPa (20 °C) 0.022 hPa (50 °C)	
Density:	0.8426 g/cm3 (20 °C)	(OECD Guideline 109)
Relative density:	0.8426 (20 °C)	
Relative vapour density (air):	6.9 (20 °C) Heavier than air.	(calculated)
Solubility in water:	2 mg/l (20 °C)	
Solubility (qualitative) solvent(s):	organic solvents soluble	
Partitioning coefficient n-octanol/water (log Pow):	6.1 (23 °C)	(OECD Guideline 117)
Adsorption/water - soil:	KOC: 1122; log KOC: 3.05	(OECD Guideline 121)
Surface tension:	64.24 mN/m (20 °C; 0.0029 g/l)	(OECD Guideline 115, Ring method)
Viscosity, dynamic:	34.9 mPa.s (20 °C)	(calculated (from kinematic viscosity))
Viscosity, kinematic:	42.9 mm2/s (20 °C)	(DIN 51562)

	41.4 mm2/s (20 °C)	(OECD Guideline 114)
Molar mass:	200.36 g/mol	

10. Stability and Reactivity

Conditions to avoid:
No special precautions other than good housekeeping of chemicals.

Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.

Substances to avoid:
strong oxidizing agents

Corrosion to metals: No corrosive effect on metal.

Hazardous reactions:
No hazardous reactions when stored and handled according to instructions.

Hazardous decomposition products:
No hazardous decomposition products if stored and handled as prescribed/indicated.

Chemical stability:
The product is stable if stored and handled as prescribed/indicated.

Reactivity:
No hazardous reactions if stored and handled as prescribed/indicated.

11. Toxicological Information

Routes of exposure

Acute oral toxicity

Experimental/calculated data:
LD50rat (oral): > 2,000 mg/kg (OECD Guideline 423)

Acute inhalation toxicity

LC0 rat (by inhalation): 0.006 mg/l 8 h (IRT)
No mortality within the stated exposition time as shown in animal studies. The vapour was tested.

Acute dermal toxicity

LD50 rabbit (dermal): approx. 6,000 mg/kg (similar to OECD guideline 402)

Assessment of acute toxicity

Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact. The inhalation of a highly enriched/saturated vapor-air-mixture represents an unlikely acute hazard.

Symptoms

Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

Irritation

Assessment of irritating effects:
Skin contact causes irritation. Not irritating to the eyes.

Experimental/calculated data:
Skin corrosion/irritation rabbit: Irritant. (OECD Guideline 404)

Serious eye damage/irritation rabbit: non-irritant (OECD Guideline 405)

Respiratory/Skin sensitization

Assessment of sensitization:
Skin sensitizing effects were not observed in animal studies.

Experimental/calculated data:
Intracutaneus test guinea pig: Non-sensitizing.
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Germ cell mutagenicity

Assessment of mutagenicity:
No mutagenic effect was found in various tests with bacteria and mammalian cell culture. The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition.

Carcinogenicity

Assessment of carcinogenicity:
No data available concerning carcinogenic effects. The whole of the information assessable provides no indication of a carcinogenic effect.

Reproductive toxicity

Assessment of reproduction toxicity:
The results of animal studies gave no indication of a fertility impairing effect. The results were determined in a Screening test.

Developmental toxicity

Assessment of teratogenicity:
No indications of a developmental toxic / teratogenic effect were seen in animal studies. Mortality observed in rabbits following high oral exposure.

Specific target organ toxicity (single exposure)

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:
The substance may cause damage to the kidney after repeated ingestion of high doses, as shown in animal studies.

Aspiration hazard

not applicable

12. Ecological Information

Ecotoxicity

Assessment of aquatic toxicity:
Very toxic (acute effect) to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations. Very toxic to aquatic organisms based on long-term (chronic) toxicity study data.

Toxicity to fish:
LC50 (96 h) 0.55 mg/l, Brachydanio rerio (OECD Guideline 203, semistatic)
The statement of the toxic effect relates to the analytically determined concentration. The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested.

Aquatic invertebrates:
EC50 (48 h) 0.391 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)
The statement of the toxic effect relates to the analytically determined concentration. The product has low solubility in the test medium. An eluate has been tested.

Aquatic plants:
EC50 (72 h) 0.297 mg/l (growth rate), Desmodesmus subspicatus (OECD Guideline 201, static)
The statement of the toxic effect relates to the analytically determined concentration. The product has low solubility in the test medium. An eluate has been tested.

EC10 (72 h) 0.215 mg/l (growth rate), Desmodesmus subspicatus (OECD Guideline 201, static)
The statement of the toxic effect relates to the analytically determined concentration. The product has low solubility in the test medium. An eluate has been tested.

Microorganisms/Effect on activated sludge:
EC20 (0.5 h) > 1,000 mg/l, activated sludge, domestic (DIN EN ISO 8192, aerobic)
The details of the toxic effect relate to the nominal concentration.

Chronic toxicity to fish:
No observed effect concentration 0.00523 mg/l, Fish (calculated)

Chronic toxicity to aquatic invertebrates:
No observed effect concentration, 0.00793 mg/l, Daphnia sp. (calculated)

EC10 (28 d), 495 mg/kg dw, Chironomus riparius (OECD Guideline218, static)

Assessment of terrestrial toxicity:

Soil living organisms:
EC10 (28 d) 1,000 mg/kg, soil dwelling microorganisms (OECD Guideline 216, natural soil)

LC50 (14 d) 64.5 mg/kg, Eisenia foetida (OECD Guideline 207, artificial soil)

Terrestrial plants:
No observed effect concentration (22 d), Brassica napus (OECD Guideline 208)

Other terrestrial non-mammals:
No data available.

Mobility

Assessment transport between environmental compartments:
The substance will slowly evaporate into the atmosphere from the water surface.
Adsorption to solid soil phase is expected.

Persistence and degradability

Elimination information:
90 - 100 % BOD of the ThOD (28 d) (OECD Guideline 301 F) (aerobic, activated sludge, domestic, non-adapted)

Assessment of stability in water:
According to structural properties, hydrolysis is not expected/probable.

Information on Stability in Water (Hydrolysis):
No data available.

Bioaccumulation potential

Assessment bioaccumulation potential:
Significant accumulation in organisms is not to be expected.

Bioaccumulation potential:
Bioconcentration factor: < 285, Fish (calculated)
The product has not been tested. The statement has been derived from the structure of the product.

Additional information

Other ecotoxicological advice:
Do not release untreated into natural waters.

13. Disposal Considerations

Must be sent to a suitable incineration plant, observing local regulations.

Contaminated packaging:
Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

14. Transport Information

Domestic transport:

UN number or ID number:	UN 3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ISOTRIDECAN-1-OL)
Transport hazard class(es):	9, EHSM
Packing group:	III
Environmental hazards:	yes
Special precautions for user:	None known

Sea transport
IMDG

UN number or ID number:	UN 3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ISOTRIDECAN-1-OL)
Transport hazard class(es):	9, EHSM
Packing group:	III
Environmental hazards:	yes Marine pollutant: YES
Special precautions for user:	EmS: F-A; S-F

Air transport
IATA/ICAO

UN number or ID number:	UN 3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ISOTRIDECAN-1-OL)
Transport hazard class(es):	9, EHSM
Packing group:	III
Environmental hazards:	yes
Special precautions for user:	None known

15. Regulatory Information

Other regulations

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

16. Other Information

Vertical lines in the left hand margin indicate an amendment from the previous version.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.