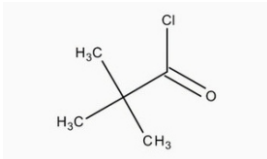


### MATERIAL SAFETY DATA SHEET (MSDS)

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

##### 1.1. Product identifier

Product form	: Substance
CAS-No.	: 3282-30-2
Product code	: 05298
Chemical structure	: 
Synonyms	: 2,2-Dimethylpropionyl chloride

##### 1.2. Relevant identified uses of the substance or mixture and uses advised against

###### 1.2.1. Relevant identified uses

Industrial/Professional use spec	: Industrial For professional use only
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###### 1.2.2. Uses advised against

No additional information available

##### 1.3. Details of the supplier of the safety data sheet

SPAN LAB  
UNIT NO. 14, SKY INDUSTRIAL ESTATE, WALIV, VASAI (E)  
401208 Mumbai - INDIA  
PH: +91 9820509929  
[info@spanlab.in](mailto:info@spanlab.in) [www.spanlab.in](http://www.spanlab.in)

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 2	H225
Corrosive to metals, Category 1	H290
Acute toxicity (oral), Category 4	H302
Acute toxicity (inhalation:gas) Category 1	H330
Skin corrosion/irritation, Category 1	H314

# PIVALOYL CHLORIDE Extra Pure

## Safety Data Sheet

Full text of H statements : see section 16

### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

### Adverse physicochemical, human health and environmental effects

No additional information available

## 2.2. Label elements

### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02

GHS05

GHS06

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H225 - Highly flammable liquid and vapour.  
H290 - May be corrosive to metals.  
H302 - Harmful if swallowed.  
H314 - Causes severe skin burns and eye damage.  
H330 - Fatal if inhaled.

Precautionary statements (CLP) :

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P240 - Ground/bond container and receiving equipment.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
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.  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

## 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Name	Product identifier	%
PIVALOYL CHLORIDE Extra Pure	(CAS-No.) 3282-30-2	100

Full text of R- and H-statements: see section 16

# PIVALOYL CHLORIDE Extra Pure

## Safety Data Sheet

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. If you feel unwell, seek medical advice.
- First-aid measures after skin contact : Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Rinse mouth out with water. If you feel unwell, seek medical advice.

### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/effects : Causes severe skin burns and eye damage.
- Symptoms/effects after inhalation : Fatal if inhaled.
- Symptoms/effects after ingestion : Harmful if swallowed.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

- Suitable extinguishing media : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO<sub>2</sub>).
- Unsuitable extinguishing media : Do not use extinguishing media containing water.

### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Highly flammable liquid and vapour.
- Explosion hazard : Heating may cause a fire or explosion.

### 5.3. Advice for firefighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

- Emergency procedures : Avoid contact with skin, eyes and clothing.

#### 6.1.2. For emergency responders

- Protective equipment : Use personal protective equipment as required.
- Emergency procedures : Stop release.

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Clean up immediately by sweeping or vacuum. Clean contaminated surfaces with an excess of water.

### 6.4. Reference to other sections

No additional information available

# PIVALOYL CHLORIDE Extra Pure

## Safety Data Sheet

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes.  
Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in original container. Store in a well-ventilated place. Store in a dry place. Keep in fireproof place.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

#### 8.2. Exposure controls

Hand protection : Protective gloves  
Eye protection : Chemical goggles or safety glasses  
Skin and body protection : Wear suitable protective clothing  
Respiratory protection : Wear respiratory protection.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid  
Molecular mass : 120.58 g/mol  
Colour : Colorless to light pink.  
Odour : No data available  
Odour threshold : No data available  
pH : No data available  
Relative evaporation rate (butylacetate=1) : No data available  
Melting point : No data available  
Freezing point : -56 °C  
Boiling point : 105 - 106 °C  
Flash point : 48 °C  
Auto-ignition temperature : No data available  
Decomposition temperature : No data available  
Flammability (solid, gas) : No data available

# PIVALOYL CHLORIDE Extra Pure

## Safety Data Sheet

Vapour pressure	: No data available
Vapour pressure at 50 °C	: 36 mm Hg
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

May be corrosive to metals.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Open flame. Direct sunlight. Overheating. Heat.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

No additional information available

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed. Inhalation:gas: Fatal if inhaled.

Skin corrosion/irritation : Causes severe skin burns and eye damage.

Serious eye damage/irritation : Serious eye damage, category 1, implicit

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

# PIVALOYL CHLORIDE Extra Pure

## Safety Data Sheet

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

### SECTION 12: Ecological information

#### 12.1. Toxicity

No additional information available

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

No additional information available

#### 12.6. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

No additional information available

### SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

#### 14.1. UN number

UN-No. (ADR)	: 2438
UN-No. (IMDG)	: 2438
UN-No. (IATA)	: 2438
UN-No. (ADN)	: 2438
UN-No. (RID)	: 2438

#### 14.2. UN proper shipping name

Proper Shipping Name (ADR)	: TRIMETHYLACETYL CHLORIDE
Proper Shipping Name (IMDG)	: TRIMETHYLACETYL CHLORIDE
Proper Shipping Name (IATA)	: Trimethylacetyl chloride
Proper Shipping Name (ADN)	: TRIMETHYLACETYL CHLORIDE

# PIVALOYL CHLORIDE Extra Pure

## Safety Data Sheet

Proper Shipping Name (RID)	: TRIMETHYLACETYL CHLORIDE
Transport document description (ADR)	: UN 2438 TRIMETHYLACETYL CHLORIDE, 6.1 (3+8), I, (C/D)
Transport document description (IMDG)	: UN 2438 TRIMETHYLACETYL CHLORIDE, 6.1 (3+8), I (19°C c.c.)
Transport document description (IATA)	: UN 2438 Trimethylacetyl chloride, 6.1, I
Transport document description (ADN)	: UN 2438 TRIMETHYLACETYL CHLORIDE, 6.1 (3+8), I
Transport document description (RID)	: UN 2438 TRIMETHYLACETYL CHLORIDE, 6.1 (3+8), I

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR)	: 6.1 (3, 8)
Danger labels (ADR)	: 6.1, 3, 8



#### IMDG

Transport hazard class(es) (IMDG)	: 6.1 (3, 8)
Danger labels (IMDG)	: 6.1, 3, 8



#### IATA

Transport hazard class(es) (IATA)	: 6.1 (3, 8)
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#### ADN

Transport hazard class(es) (ADN)	: 6.1 (3, 8)
Danger labels (ADN)	: 6.1, 3, 8



#### RID

Transport hazard class(es) (RID)	: 6.1 (3, 8)
Danger labels (RID)	: 6.1, 3, 8



### 14.4. Packing group

Packing group (ADR)	: I
Packing group (IMDG)	: I
Packing group (IATA)	: I
Packing group (ADN)	: I
Packing group (RID)	: I

# PIVALOYL CHLORIDE Extra Pure


## Safety Data Sheet

### 14.5. Environmental hazards

Dangerous for the environment	: No
Marine pollutant	: No
Other information	: No supplementary information available

### 14.6. Special precautions for user

#### - Overland transport

Classification code (ADR)	: TFC
Limited quantities (ADR)	: 0
Excepted quantities (ADR)	: E0
Packing instructions (ADR)	: P001
Mixed packing provisions (ADR)	: MP8, MP17
Portable tank and bulk container instructions (ADR)	: T14
Portable tank and bulk container special provisions (ADR)	: TP2
Tank code (ADR)	: L10CH
Tank special provisions (ADR)	: TU14, TU15, TE19, TE21
Vehicle for tank carriage	: FL
Transport category (ADR)	: 1
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV1, CV13, CV28
Special provisions for carriage - Operation (ADR)	: S2, S9, S14
Hazard identification number (Kemler No.)	: 663
Orange plates	: 
Tunnel restriction code (ADR)	: C/D
EAC code	: •3WE
APP code	: A(fl)

#### - Transport by sea

Packing instructions (IMDG)	: P001
Tank instructions (IMDG)	: T14
Tank special provisions (IMDG)	: TP2, TP13
EmS-No. (Fire)	: F-E
EmS-No. (Spillage)	: S-C
Stowage category (IMDG)	: D
Stowage and handling (IMDG)	: SW1, SW2
Segregation (IMDG)	: SG5, SG8
Flash point (IMDG)	: 19°C c.c.
Properties and observations (IMDG)	: Flammable liquid. Flashpoint: 19°C c.c. Boiling point: 108°C. Reacts with water, evolving hydrogen chloride, a corrosive gas apparent as white fumes. In the presence of moisture, corrosive to most metals. Highly toxic if swallowed, by skin contact or by inhalation. Causes burns to skin, eyes and mucous membranes.

#### - Air transport

PCA Limited quantities (IATA)	: Forbidden
PCA limited quantity max net quantity (IATA)	: Forbidden
PCA packing instructions (IATA)	: Forbidden
PCA max net quantity (IATA)	: Forbidden



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CAO packing instructions (IATA) : Forbidden  
CAO max net quantity (IATA) : Forbidden  
ERG code (IATA) : 6FW

### - Inland waterway transport

Classification code (ADN) : TFC  
Special provisions (ADN) : 802  
Limited quantities (ADN) : 0  
Excepted quantities (ADN) : E0  
Equipment required (ADN) : PP, EP, EX, TOX, A  
Ventilation (ADN) : VE01, VE02  
Number of blue cones/lights (ADN) : 2

### - Rail transport

Classification code (RID) : TFC  
Limited quantities (RID) : 0  
Excepted quantities (RID) : E0  
Packing instructions (RID) : P001  
Mixed packing provisions (RID) : MP8, MP17  
Portable tank and bulk container instructions (RID) : T14  
Portable tank and bulk container special provisions (RID) : TP2  
Tank codes for RID tanks (RID) : L10CH  
Special provisions for RID tanks (RID) : TU14, TU15, TU38, TE21, TE22  
Transport category (RID) : 1  
Special provisions for carriage - Loading, unloading and handling (RID) : CW13, CW28, CW31  
Hazard identification number (RID) : 663

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

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

PIVALOYL CHLORIDE Extra Pure is not on the REACH Candidate List

PIVALOYL CHLORIDE Extra Pure is not on the REACH Annex XIV List

#### 15.1.2. National regulations

##### Germany

Reference to AwSV : Water hazard class (WGK) 1, low hazard to water (Classification according to AwSV; ID No. 1786)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

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## Safety Data Sheet

### Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed  
SZW-lijst van mutagene stoffen : The substance is not listed  
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed  
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed  
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

### Denmark

Class for fire hazard : Class II-1  
Store unit : 5 liter  
Classification remarks : R10 <H225;H290;H302;H314;H330>; Emergency management guidelines for the storage of flammable liquids must be followed  
Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

## 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

Full text of R-, H- and EUH-statements:

Acute Tox. 1 (Inhalation:gas)	Acute toxicity (inhalation:gas) Category 1
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Flam. Liq. 2	Flammable liquids, Category 2
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1	Skin corrosion/irritation, Category 1
H225	Highly flammable liquid and vapour.
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H330	Fatal if inhaled.

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*