

An ISO-9001:2008 Certified Company

(CODE) SECTION: WI/SM

(CODE) DOCUMENT: WI

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Issue : 02

(DATE) : 01.04.2013

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Rev.: 00

Quality Assurance Department

Title: MATERIAL SAFETY DATA SHEET (MSDS): TRITYL CHLORIDE

SECTION 1- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: Trityl chloride

Catalog Numbers: T012

Synonyms: Triphenylchloromethane, Chlorotriphenylmethane, Triphenylmethyl

chloride

CAS-No.: 76-83-5

Company Information:

LEONID CHEMICALS Pvt Ltd,

62/A2 1st Stage,

Yeshwanthpur Industrial Suburb, Ashokapuram School Road, Bangalore -22, Karnataka, INDIA

Ph- +91-80-23378354

Fax: +918023378354/23377126 Email: <u>lab@leonidchemicals.net</u>

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP] Skin corrosion (Category 1B)

Classification according to EU Directives 67/548/EEC or 1999/45/EC Causes burns.

Label elements

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

Hazard statement(s)

H314 Causes severe skin burns and eye damage.

Precautionary statement(s)

P280 Wear protective gloves/ protective clothing/ eye protection/

face protection.

P305 + P351 + P338 IF

IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/ physician.



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Supplemental Hazard

Statements: none

According to European Directive 67/548/EEC as amended.

Hazard symbol(s)

R-phrase(s)

R34 Causes burns.

S-phrase(s)

S26 In case of contact with eyes, rinse immediately with plenty of water and

seek medical advice.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

In case of accident or if you feel unwell, seek medical advice immediately

(show the label where possible).

Other hazards

Lachrymator.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Formula : C19H15Cl Molecular Weight : 278,78 g/mol

Component		Concentration
Chlorotriphenylmethane		
CAS-No.	76-83-5	-
EC-No.	200-986-4	

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

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



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In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delayed Cough, Shortness of breath, Headache, Nausea, Vomiting

Indication of any immediate medical attention and special treatment needed no data available

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture

Carbon oxides, Hydrogen chloride gas

Advice for firefighters

Wear self contained breathing apparatus for firefighting if necessary.

Further information

no data available

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE



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Precautions for safe handling

Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Store under inert gas. Moisture sensitive.

Specific end uses

no data available

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components with workplace control parameters

Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

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.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).



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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

a) Appearance Form : powder

Colour : light yellow

b) Odour : no data available

c) Odour Threshold : no data available

d) pH : no data available

e) Melting point/freezing

point : 109 - 112 °C - lit.

f) Initial boiling point and

boiling range : 230 - 235 °C at 27 hPa - lit.

g) Flash point : no data available

h) Evaporation rate : no data available

i) Flammability (solid, gas) : no data available

j) Upper/lower flammability or

explosive limits : no data available

k) Vapour pressure : no data available

I) Vapour density : no data available

m) Relative density : no data available

n) Water solubility : no data available

o) Partition coefficient:

noctanol/water : no data available

p) Autoignition

temperature : no data available

q)temperature : no data available

r) Viscosity : no data available



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s) Explosive properties : no data available

t) Oxidizing properties : no data available

Other safety information

no data available

SECTION 10: STABILITY AND REACTIVITY

Reactivity

no data available

Chemical stability

no data available

Possibility of hazardous reactions

no data available

Conditions to avoid

Avoid moisture.

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Other decomposition products - no data available

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects Acute toxicity

LD50 Intravenous - mouse - 180 mg/kg

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available



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Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Potential health effects

Inhalation May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

Ingestion May be harmful if swallowed. Causes burns.

Skin May be harmful if absorbed through skin. Causes skin burns.

Eyes Causes eye burns.

Signs and Symptoms of Exposure

Cough, Shortness of breath, Headache, Nausea, Vomiting

Additional Information

RTECS: PA6450000

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

no data available

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available



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Results of PBT and vPvB assessment

no data available

Other adverse effects

no data available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

UN number

ADR/RID: 3261 IMDG: 3261 IATA: 3261

UN proper shipping name

ADR/RID : CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (Chlorotriphenylmethane) : CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (Chlorotriphenylmethane) **IMDG**

: Corrosive solid, acidic, organic, n.o.s. (Chlorotriphenylmethane) IATA

Transport hazard class(es)

ADR/RID: 8 IATA: 8 IMDG: 8

Packaging group

ADR/RID: III IMDG: III IATA: III

Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

Special precautions for user

no data available

SECTION 15: REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.



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

no data available

Chemical Safety Assessment no data available

SECTION 16: ADDITIONAL INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Leonid Chemicals Pvt. Ltd. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Leonid Chemicals Pvt. Ltd. has been advised of the possibility of such damages.





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Title: SPECIFICATION MANUAL - TRITYL CHLORIDE

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Specification manual - Trityl chloride

 $C_{19}H_{15}Cl$ MW: 278.77

Product : Trityl chloride

Description : White to off white or light yellow – beige powder or crystals

Cat No : T012 Cas No : 76-83-5 **Prepared Date** : 24/04/2012 **Approved Date** : 24/04/2012

REVISION HISTORY							
Issue/Rev	Description of Change		Author	Effective Date			
01/00	Initial Release		S. Paul Joshua	24.04.2012			
02/00	Reviewed no changes		S. Paul Joshua	NA			
Next Review Due:		02.04.2015					
To be reviewed by:		Head-QC/QA					

Sl. No.	Tests	Specification	Protocol
51. 140.		LR	
1	Description	White to off white or light yellow –	LCPL
		beige powder or crystals	
2	Assay (AT)	97 %	LCPL
3	Melting point	109 -112° C	2/4/11