

SECTION 1: PRODUCT AND COMPANY INFORMATION

Product Name: **Isopropyl Magnesium Chloride**

Company Name: **Novaphene Specialities Pvt Ltd**
211 Agarwal Industrial Estate,
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SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flammable liquids (Category 2), H225

Substances, which in contact with water, emit flammable gases (Category 2), H261

Skin corrosion (Category 1B), H314

Specific target organ toxicity - single exposure (Category 3), H335

For full text of the H-Statements mentioned in this section, see section 16

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

F	Highly flammable	R11, R15
C	Corrosive	R34
Xi	Irritant	R37
		R19, R14

For the full text of the R-phrases mentioned in this Section, see Section 16.

Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word **Danger**

Hazard statement(s)

H225	Highly flammable liquid and vapour.
H261	In contact with water releases flammable gases.
H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation.

Precautionary statement(s)

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P231 + P232	Handle under inert gas. Protect from moisture.
P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
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.
P422	Store contents under inert gas.

Supplemental Hazard Statements (EU)

EUH014	Reacts violently with water.
EUH019	May form explosive peroxides.

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

Hazard symbol(s)	F	Highly flammable
	C	Corrosive



R-phrases(s)

R11	Highly flammable.
R14/15	Reacts violently with water, liberating extremely flammable gases.
R19	May form explosive peroxides.
R34	Causes burns.
R37	Irritating to respiratory system.

S-phrases(s)

S 9	Keep container in a well-ventilated place.
S16	Keep away from sources of ignition - No smoking.
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.
S43	In case of fire, use dry powder. Never use water.
S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Other hazards

none

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Formula :	C_3H_7ClMg
Molecular Weight :	102.85 g/mol

Hazardous ingredients according to regulation (EC) No 1272/2008

Component	Classification	Concentration
Tetrahydrofuran		
CAS # 109-99-9 EC # 203-726-8 Index # 603-025-00-0	Flam. Liq. 2; Eye Irrit. 2; Carc. 2; STOT SE 3; H225, H319, H335, H351, EUH019	50-100%
Isopropylmagnesium Chloride		
CAS # 1068-55-9 EC # 213-947-1	Water-react 1; Skin corr. 1B; H260, H314, EUH014	25 - 25 %

Hazardous ingredients according to Directive 1999/45/EC

Component	Classification	Concentration
Tetrahydrofuran		
CAS # 109-99-9 EC # 203-726-8 Index # 603-025-00-0	F, Xn, Carc. Cat 3, R11 - R19 - R40 - R 36/37	50-100%
Isopropylmagnesium Chloride		
CAS # 1068-55-9 EC # 213-947-1	F, C, R14/15 - R34	25 - 25 %

For the full text of the H-statements and R-phrases mentioned in the section, see Section 16

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.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing media
Dry Powder

Special hazards arising from the substance or mixture
Carbon oxides, Hydrogen chloride gas, Magnesium oxide

Advice for firefighters
Wear self contained breathing apparatus for fire fighting if necessary.

Further information
No data available

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
For personal protection see section 8

Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up
Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Do not flush with water.

Reference to other sections
For disposal see section 13

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.
For precaution see section 2.2

Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Moisture sensitive. Never allow product to get in contact with water during storage.

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**

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

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.

Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing, 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 respirator with multi-purpose combination (US) or type ABEK (EN 14387) 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).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties****a) Appearance**

Form: liquid

b) Odour

Colour: grey

c) Odour Threshold

no data available

d) pH

no data available

e) Melting point/freezing point

no data available

f) Initial boiling point and boiling range

no data available

g) Flash point

no data available

h) Evaporation rate

-17 °C - closed cup

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
l) Vapour density	no data available
m) Relative density	0.975 g/ml at 25 °C
n) Water solubility	no data available
o) Partition coefficient octanol/ water	no data available
p) Autoignition temperature	The substance or mixture is not classified as pyrophoric
q) Decomposition temperature	no data available
r) Viscosity	no data available
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

Reacts violently with water.

Conditions to avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight. Exposure to moisture.

Incompatible materials

Water, Alcohols, Oxidizing agents, Oxygen, Acids

Hazardous decomposition products

Other decomposition products - no data available

SECTION 11: TOXICOLOGICAL INFORMATION**Information on toxicological effects****Acute toxicity**

no data available

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

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

Additional Information

RTECS: Not available

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

Results of PBT and vPvB assessment

no data available

Other adverse effects

no data available

SECTION 13: DISPOSAL CONSIDERATIONS**Waste treatment methods****Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging
Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

UN number

ADR/RID: 3399

IMDG: 3399

IATA: 3399

UN proper shipping name

ADR/RID: ORGANOMETALLIC SUBSTANCE, LIQUID, WATER-REACTIVE, FLAMMABLE (Tetrahydrofuran, Isopropylmagnesium chloride)

IMDG: ORGANOMETALLIC SUBSTANCE, LIQUID, WATER-REACTIVE, FLAMMABLE (Tetrahydrofuran, Isopropylmagnesium chloride)

IATA: Organometallic substance, liquid, water-reactive, flammable (Tetrahydrofuran, Isopropylmagnesium chloride)

Transport hazard class(es)

ADR/RID: 4.3 (3)

IMDG: 4.3 (3)

IATA: 4.3 (3)

Packaging group

ADR/RID: II

IMDG: II

IATA: II

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.

Safety, health and environmental regulations/legislation specific for the substance or mixture
no data available

Chemical Safety Assessment

no data available

SECTION 16: OTHER INFORMATION

Text of H-code(s) and R-phrases mentioned in Section 3

EUH014 Reacts violently with water.

EUH019 May form explosive peroxides.

Eye Irrit. Eye irritation

Flam. Liq. Flammable liquids

H225 Highly flammable liquid and vapour.

H260 In contact with water releases flammable gases which may ignite spontaneously.

H261 In contact with water releases flammable gases.

H314 Causes severe skin burns and eye damage.

H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
Skin Corr.	Skin corrosion
STOT SE	Specific target organ toxicity - single exposure
Water-react.	Substances, which in contact with water, emit flammable gases.

Full text of R-phrases referred to under sections 2 and 3

C	Corrosive
F	Highly flammable.
R11	Highly flammable.
R14	Reacts violently with water.
R14/15	Reacts violently with water, liberating extremely flammable gases.
R15	Contact with water liberates extremely flammable gases.
R19	May form explosive peroxides.
R34	Causes burns.
R36/37	Irritating to eyes and respiratory system.
R37	Irritating to respiratory system.
R40	Limited evidence of a carcinogenic effect.
Xn	Harmful

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Novaphene, shall not be held liable for any damage resulting from handling or from contact with the above product.