SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name Normal Paraffin C_{-10}-C_{13}

Synonyms Hydrocarbons, C_{10}-C_{13},n-alkanes, <2%aromatics

Product Use This product is used for preparation of paints and as a solvent, general purpose, cleaner, car maintenance product, oil stain remover, lamp oil lighter fluid.

Company Iran Chemical Industries Investment Co. (ICIIC)

Address Western side of Montazeri Power Plant, Azadegan Highway (15 km northward), Esfahan, Iran.

Emergency telephone number

E-mail address

SECTION 2 HAZARDS IDENTIFICATION

LABEL ELEMENTS

Hazard symbols



Signal word Danger

Hazard statements H304 May be fatal if swallowed and enters airways.

PRECAUTIONARY STATEMENTS

Response IF SWALLOWED: Immediately call a POISON CENTER of physician. Do NOT induce vomiting.

Storage Store locked up

Disposal Not applicable

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Components	EC No.	CAS-No.	Weight Percent
Normal Paraffin, C_{10}- C_{13}	929-018-5	93924-07-3	98 min

See Section 8 for Exposure Guidelines and Section 15 for Regulatory Classifications.

SECTION 4 FIRST AID MEASURES

Eye contact Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact

Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

SECTION 5 FIREFIGHTING MEASURES

Suitable Extinguishing media

Use dry chemical, CO_2, water spray (fog) or foam.

Fire/explosion

May be ignited by open flame. NFPA Class IIIB combustible liquid.

Protective equipment and precautions for firefighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents

Fire- fighting measures

Shut off all ignition sources. If fire cannot be extinguished, withdraw from area and allow the fire to burn. Use water spray to keep fire-exposed containers cool.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and cleaning up

Small spill

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste

SECTION 7 HANDLING AND STORAGE

Safe storage advice

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Storage/Transport pressure

Ambient

Load/Unload temperature

Ambient

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

EXPOSURE GUIDELINES

Exposure limit values

INSHT (Spain, 5/2010). Absorbed through skin.

TWA: 5 mg/m³ 8 hour(s). Form: mist

STEL: 10 mg/m³ 15 minute(s). Form: mist

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or o the r control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

Measures

No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

INDIVIDUAL PROTECTION MEASURES

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eyes	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. Recommended: Splash goggles.
Skin	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. >8 hours (breakthrough time): Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Nitrile gloves. Polyethylene (PE) Viton® PVA gloves. PVC gloves. To protect body and foot, wear chemical-resistant protective suit and footwear.
Inhalation	Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	liquid;
Colour	colourless
Form	liquid
Odour	characteristic
Odour Threshold	no data available
pH	no data available
Melting point/freezing point	-23°C (-9.4°F)
Boiling point/boiling range	190-240°C (374-464°F)
Flash point	70°C (158°F)
Flammability	Upper explosion limit: no data available Lower explosion limit: no data available
Evaporation rate	no data available
Upper/lower flammability or explosive limits	Lower: 05% Upper: 7%
Vapour pressure	0.044kPa [20°C]
Vapour density	5.7 [air=1] kg/m^3
Average Molecular weight	163-169 g/mol
Density	0.7490-0.7530 g/cm^3 @ 15.6°C (60°F)
Water solubility	Insoluble
Partition coefficient: n-octanol/water	>1
Auto-ignition temperature	>200°C (392°F)
Decomposition temperature	no data available
Viscosity	[ASTM D 445] 1.66 c.St@0.0°C(32°F) [ASTM D 445] 1.4 c.St@40°C(104°F)

SECTION 10 STABILITY AND REACTIVITY

Reactivity No specific test data related to reactivity available for this product or its ingredients.

Chemical stability The product is stable.

Conditions to avoid No specific data.

Hazardous decomposition products Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Materials to avoid No specific data.

Possibility of hazardous reactions Under normal conditions of storage and use, hazardous reactions will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Hydrocarbons, C10-C13, n-alkanes,<2% aromatics	LD50 Dermal LD50 Oral	Rabbit Rat	>5000 mg/kg >5000 mg/kg	- -

Conclusion/Summary Not available

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Hydrocarbons, C_{10}-C_{13}, n-alkanes,<2% aromatics	Skin- Erythema/Eschar	Rabbit	2	72 hours	-
	Skin- Edema	Rabbit	0	72 hours	-
	Eyes- Edema of the conjunctivae	Rabbit	0	-	-
	Eyes- Redness of the conjunctivae	Rabbit	0	-	-

Conclusion/Summary

Skin Not classified.

Eyes Not classified.

Respiratory No known significant effects or critical hazards.

Sensitization

Product/ingredient name	Route of exposure	Species	Result
Hydrocarbons, C_{10}-C_{13}, n-alkanes,<2% aromatics	Skin	Guinea pig	Not sensitizing

Conclusion/ Summary

Skin Not classified.

Respiratory No known significant effects or critical hazards.

Mutagenicity

Product/ingredient name	Test	Experiment	Result
Hydrocarbons, C_{10}-C_{13}, n-alkanes, <2% aromatics	- -	Experiment: In vitro Subject: Bacteria Experiment: In vitro Subject: Mammalian-Animal	Negative Negative

Conclusion/ Summary Not mutagenic in a standard battery of genetic toxicological tests.

Carcinogenicity

Conclusion/Summary No known Significant effects of critical hazards.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
Hydrocarbons, C_{10}-C_{13}, n-alkanes, <2% aromatics	Negative	Negative	Negative	Rat	Inhalation: >5220 mg/m^3	-

Conclusion/ Summary No known significant effects or critical hazards.

Teratogenicity

Conclusion/Summary No known Significant effects of critical hazards.

Specific target organ toxicity (single exposure)
Not available.

Specific target organ toxicity (repeated exposure)
Not available.

Aspiration hazard

Product/ingredient name	Result
Hydrocarbons, C10-C13, n-alkanes, <2% aromatics	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure Not available.

Potential acute health effects

Eye contact No known significant effects or critical hazards.

Inhalation No known significant effects or critical hazards.

Skin contact Defatting to the skin. May cause skin dryness and irritation.

Ingestion May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact No specific data

Inhalation Eye No specific data

Skin contact Adverse symptoms may include the following:
irritation
dryness
cracking

Ingestion Adverse symptoms may include the following:
nausea or vomiting

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects Not available.

Potential delayed effects Not available.

Long term exposure

Potential immediate effects Not available.

Potential delayed effects Not available.

Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
Hydrocarbons, C10-C13, n-alkanes,<2% aromatics	Sub-chronic NOAEL Oral	Rat	>5000 mg/kg	90 days
	Sub-chronic NOAEL Inhalation Vapor	Rat	>10400 mg/m^3	90 days

Conclusion/Summary Not available.

General Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Carcinogenicity No known significant effects or critical hazards.

Mutagenicity No known significant effects or critical hazards.

Teratogenicity No known significant effects or critical hazards.

Developmental effects No known significant effects or critical hazards.

Fertility effects No known significant effects or critical hazards.

Other information Not available.

SECTION 12 ECOLOGICAL INFORMATION

toxicity

Product/ingredient name	Result	Species	Exposure
Hydrocarbons, C_{10}-C_{13}, n-alkanes, <2% aromatics	Acute EC50 >1000 mg/l	Daphnia - Daphnia magna	48 hours
	Acute EC50 10 to 51 mg/l	Fish - Oncorhynchus mykiss	96 hours
	Acute LC50 >10000 mg/l	Crustaceans - Arcadia tonsa	48 hours
	Chronic NOEC 0,361 mg/l	Crustaceans	21 days
	Chronic NOEC 0,139 mg/l	Fish	28 days

Conclusion/Summary Not available.

Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Hydrocarbons, C_{10}-C_{13}, n-alkanes, <2% aromatics	-	83 % - Readily- 28 days	-	-

Conclusion/Summary Biodegradationn in degree in circulating air: >96% is eliminated in 24 hours.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Hydrocarbons, C_{10}-C_{13}, n-alkanes, <2% aromatics	-	< 28 day(s)	Readily

Bioaccumulative potential

Product/ingredient name	LogP $_{ow}$	BCF	Potential
Hydrocarbons, C_{10}-C_{13}, n-alkanes, <2% aromatics	>1	-	low

Mobility in soil

Soil/water partition coefficient (K_{OC}) Not available.

Mobility Not available.

Results of PBT and vPvB assessment

PBT No

PBT: Specified

vPvB No

vPvB: Specified

Other adverse effects No known significant effects or critical hazards.

SECTION 13 DISPOSAL CONSIDERATIONS

Product disposal methods The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Hazardous waste The classification of the product may meet the criteria for a hazardous waste.

Containers disposal methods The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14 TRANSPORT INFORMATION

CANADIAN TRANSPORTATION OF DANGEROUS GOODS (CTDG): -

U.S. DOT DESCRIPTION (ground transportation): -

ICAO/IATA DESCRIPTION/IMO DESCRIPTION (IMDG CODE): Not regulated

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

Proper shipping name	:	**n-ALKANES (C10+)**
Ship type	:	**3**
Pollution category	:	**Y**

SECTION 15 REGULATORY INFORMATION

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	Not applicable.

Other EU regulations

Europe inventory	This material is listed or exempted.
Black List Chemicals	Not listed
Priority List Chemicals	Not listed
Integrated pollution prevention and control list (IPPC) - Air	Not listed
Integrated pollution prevention and control list (IPPC) - Water	Not listed

International regulations

Chemical Weapons Convention List Schedule I Chemicals	Not listed
Chemical Weapons Convention List Schedule II Chemicals	Not listed
Chemical Weapons Convention List Schedule III Chemicals	Not listed
Chemical Safety Assessment	Complete

SECTION 16 OTHER INFORMATION

Abbreviations and acronyms

ASTM: American Society for Testing and Materials

BCF: Bio-Concentration Factor

CAS: Chemical Abstracts Service (division of the American Chemical Society)

CLP: Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008]

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

GHS: Globally Harmonized system

ICAO/ATA: International Civil Aviation Organisation/International Air Transport Association

IMDG: International Maritume Dangerous Good

INSHT: Spanish: National Institute of Safety and Hygiene at work

LD50: Lethal dose, 50 percent

MARPOL: Maritime Pollution

NFPA: National Fire Protection Association

NOAEL: No-Observed-Adverse-Effect level

NOEC: No-Observed-Effect Concentration

PBT: Persistent Bioaccumulative toxic

Reach: Registration, Evaluation, Authorization and restriction of chemicals

STEL: Short Time Exposure Limit

TWA: Total Weighted Average

vPvB: Very Persistent very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Asp. Tox. 1, H304	Expert judgment

Full text of abbreviated H statements H304 May be fatal if swallowed and enters airways.

Full text of classifications [CLP/GHS] Asp. Tox. 1, H304 ASPIRATION HAZARD - Category 1

Full text of abbreviated R phrases R65- Harmful: may cause lung damage if swallowed.
R66- Repeated exposure may cause skin dryness or cracking.

Full text of classifications [DSD/DPD] Xn - Harmful

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