

Chemwatch GHS Safety Data Sheet Issue Date: 13-Aug-2012 C868SP

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Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME ENI ARNICA (ISO VG 46)

OTHER NAMES "Product Code: IS2532"

PRODUCT USE

■ Used according to manufacturer's directions.

SUPPLIER

Company: ITALCO (Far East) Pte Ltd Address: 101 Thomson Road, #26- 02 United Square, 307591 Singapore Telephone: +65 6659 1250 Emergency Tel: +800 24 362 255 Emergency Tel: +61 3 9573 3112 Fax: +65 6659 1251 Email: Info@italco.com.sg

Section 2 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Not hazardous

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%	
highly refined			
mineral oil	Not avail.	>60	
naphtha petroleum, heavy, hydrotreated	64742-48-9.	<10	
Stoddard Solvent	8052-41-3.	<10	
paraffinic distillate, heavy, solvent- dewaxed (severe)	64742-65-0.	<5	
other ingredients not contributing to the classification		balance	

Section 4 - FIRST AID MEASURES

SWALLOWED

• If swallowed do NOT induce vomiting.

• If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and

prevent aspiration.

• Observe the patient carefully.

• Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.

EYE

■ If this product comes in contact with the eyes:

• Wash out immediately with fresh running water.

• Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting

the upper and lower lids.

- Seek medical attention without delay; if pain persists or recurs seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

SKIN

- If skin or hair contact occurs:
- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

INHALED

- If fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.
- Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.

NOTES TO PHYSICIAN

- Treat symptomatically.
- Heavy and persistent skin contamination over many years may lead to dysplastic changes. Pre-existing skin disorders may be aggravated by exposure to this product.
- In general, emesis induction is unnecessary with high viscosity, low volatility products, i.e. most oils and greases.

• High pressure accidental injection through the skin should be assessed for possible incision, irrigation and/or debridement. NOTE: Injuries may not seem serious at first, but within a few hours tissue may become swollen, discoloured and extremely painful with extensive subcutaneous necrosis.

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

- Foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.

FIRE FIGHTING

- Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves in the event of a fire.
- Prevent, by any means available, spillage from entering drains or water courses.
- Use fire fighting procedures suitable for surrounding area.

FIRE/EXPLOSION HAZARD

- Combustible.
- Slight fire hazard when exposed to heat or flame.
- · Heating may cause expansion or decomposition leading to violent rupture of containers.
- On combustion, may emit toxic fumes of carbon monoxide (CO).

Combustion products include: carbon dioxide (CO2), metal oxides, other pyrolysis products typical of burning organic material. May emit poisonous fumes.

CARE: Water in contact with hot liquid may cause foaming and a steam explosion with wide scattering of hot oil and possible severe burns. Foaming may cause overflow of containers and may result in possible fire.

FIRE INCOMPATIBILITY

• Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

Section 6 - ACCIDENTAL RELEASE MEASURES

MINOR SPILLS

- Slippery when spilt.
- Remove all ignition sources.
- · Clean up all spills immediately.
- · Avoid breathing vapours and contact with skin and eyes.
- Control personal contact with the substance, by using protective equipment.

MAJOR SPILLS

■ Slippery when spilt.

Moderate hazard.

Clear area of personnel and move upwind.

• Alert Fire Brigade and tell them location and nature of hazard.

- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.
 Personal Protective Equipment advice is contained in Section 8 of the MSDS.

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

- Containers, even those that have been emptied, may contain explosive vapours.
- Do NOT cut, drill, grind, weld or perform similar operations on or near containers.
- Electrostatic discharge may be generated during pumping this may result in fire.
- Ensure electrical continuity by bonding and grounding (earthing) all equipment.
- Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (<=1 m/sec until fill pipe submerged to twice its diameter, then <= 7 m/sec).
- Avoid splash filling.
- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Prevent concentration in hollows and sumps.

SUITABLE CONTAINER

- Metal can or drum
- Packaging as recommended by manufacturer.
- Check all containers are clearly labelled and free from leaks.

STORAGE INCOMPATIBILITY

• CARE: Water in contact with heated material may cause foaming or a steam explosion with possible severe burns from wide scattering of hot material. Resultant overflow of containers may result in fire.

· Avoid reaction with oxidising agents.

STORAGE REQUIREMENTS

- · Store in original containers.
- Keep containers securely sealed.
- No smoking, naked lights or ignition sources.
- Store in a cool, dry, well-ventilated area.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS Source	Material	TWA ppm	TWA mg/m³	STEL ppm	STEL mg/m ³	
Singapore Permissible Exposure Limits of	naphtha petroleum, heavy, hydrotreated	300	890	1480	500	
Toxic Substances Singapore Permissible Exposure Limits of Toxic Substances	(Gasoline) Stoddard Solvent (Naphtha)	300	1370			
Singapore Permissible Exposure Limits of Toxic Substances	Stoddard Solvent (Stoddard solvent)	100	525			
The following materials had no OELs on our records						

paraffinic distillate, heavy, solvent- dewaxed (severe):

CAS:64742-65-0

MATERIAL DATA

NAPHTHA PETROLEUM, HEAVY, HYDROTREATED: PARAFFINIC DISTILLATE, HEAVY, SOLVENT-DEWAXED (SEVERE):

STODDARD SOLVENT:

• Sensory irritants are chemicals that produce temporary and undesirable side-effects on the eyes, nose or throat. Historically occupational exposure standards for these irritants have been based on observation of workers' responses to various airborne concentrations.

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■ for mineral oils (excluding metal working fluids), pure, highly and severely refined:

Human exposure to oil mist alone has not been demonstrated to cause health effects except at levels above 5 mg/m3 (this applies to particulates sampled by a method that does not collect vapour). It is not advisable to apply this standard to oils containing unknown concentrations and types of additive.

NAPHTHA PETROLEUM, HEAVY, HYDROTREATED:

STODDARD SOLVENT:

■ Odour threshold: 0.25 ppm.

The TLV-TWA is protective against ocular and upper respiratory tract irritation and is recommended for bulk handling of gasoline based on calculations of hydrocarbon content of gasoline vapour.

ENI ARNICA (ISO VG 46):

■ Toxicity and Irritation data for petroleum-based mineral oils are related to chemical components and vary as does the composition and source of the original crude.

A small but definite risk of occupational skin cancer occurs in workers exposed to persistent skin contamination by oils over a period of years.

Petroleum oils which are solvent refined/extracted or severely hydrotreated, contain very low concentrations of both.

NAPHTHA PETROLEUM, HEAVY, HYDROTREATED:

[EXXON]

REL TWA: 300 ppm as VM & P naphtha TLV TWA: 300 ppm, 1370 mg/m3

STODDARD SOLVENT:

For white spirit:

Low and high odour thresholds of 5.25 and 157.5 mg/m3, respectively, were considered to provide a rather useful index of odour as a warning property.

The TLV-TWA is calculated from data on the toxicities of the major ingredients and is intended to minimise the potential for irritative and narcotic effects, polyneuropathy and kidney damage produced by vapours.<</>

PARAFFINIC DISTILLATE, HEAVY, SOLVENT-DEWAXED (SEVERE):

■ NOTE L: The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3% DMSO extract as measured by IP 346. European Union (EU) List of Dangerous Substances (Annex I) - up to the 29th ATP.

PERSONAL PROTECTION

RESPIRATOR

•Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

EYE

· Safety glasses with side shields

· Chemical goggles.

Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent].

HANDS/FEET

■ The selection of the suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.

Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include:.

• Wear chemical protective gloves, eg. PVC.

• Wear safety footwear or safety gumboots, eg. Rubber.

OTHER

- Overalls.
- P.V.C. apron.
- Barrier cream.
- Skin cleansing cream.

ENGINEERING CONTROLS

■ Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

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The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Liquid with a characteristic odour; does not mix with water.

PHYSICAL PROPERTIES

Liquid. Does not mix with water. Floats on water.

State Melting Range (°C)

Boiling Range (°C) Flash Point (°C) Decomposition Temp (°C) Autoignition Temp (°C) Upper Explosive Limit (%)

Lower Explosive Limit (%)

Volatile Component (%vol)

Liquid - 36 (pour pt) (ASTM D 97) Not Available 205 (COC) (ASTM D 92) Not Available Not Available Not Available

Not Available

Not Available

Vapour Pressure (kPa) Specific Gravity (water=1) Relative Vapour Density (air=1) Evaporation Rate

Solubility in water (g/L)

Molecular Weight

pH (1% solution)

pH (as supplied)

Viscosity

Not Applicable 42- 48 (ASTM D 445) cSt@40°C Immiscible Not Applicable Not Applicable Not Available 0.871- 0.879 @ 15 deg C (ASTM D 4052) Not Available

Not Available

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY

Presence of incompatible materials.

• Product is considered stable.

Hazardous polymerisation will not occur.

For incompatible materials - refer to Section 7 - Handling and Storage.

Section 11 - TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

- Accidental ingestion of the material may be damaging to the health of the individual.
- Isoparaffinic hydrocarbons cause temporary lethargy, weakness, inco-ordination and diarrhoea.

EYE

Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).

Instillation of isoparaffins into rabbit eyes produces only slight irritation.

SKIN

• The liquid may be miscible with fats or oils and may degrease the skin, producing a skin reaction described as non-allergic contact dermatitis.

The material is unlikely to produce an irritant dermatitis as described in EC Directives .

- Skin exposure to isoparaffins may produce slight to moderate irritation in animals and humans.
- Rare sensitisation reactions in humans have occurred.
- Open cuts, abraded or irritated skin should not be exposed to this material.
- The material may accentuate any pre-existing dermatitis condition.

• Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

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INHALED

■ The material is not thought to produce respiratory irritation (as classified by EC Directives using animal models).

Nevertheless inhalation of vapours, fumes or aerosols, especially for prolonged periods, may produce respiratory discomfort and occasionally, distress.

■ Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual.

- Inhalation hazard is increased at higher temperatures.
- Inhalation of oil droplets or aerosols may cause discomfort and may produce chemical inflammation of the lungs.
- Nerve damage can be caused by some non-ring hydrocarbons.

Symptoms are temporary, and include weakness, tremors, increased saliva, some convulsions, excessive tears with discolouration and inco-ordination lasting up to 24 hours.

CHRONIC HEALTH EFFECTS

■ Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

Repeated application of mildly hydrotreated oils (principally paraffinic), to mouse skin, induced skin tumours; no tumours were induced with severely hydrotreated oils.

Oil may contact the skin or be inhaled. Extended exposure can lead to eczema, inflammation of hair follicles, pigmentation of the face and warts on the soles of the feet. Exposure to oil mists can cause asthma, pneumonia and scarring of the lungs. Oils have been linked to cancer of the skin and scrotum. Compounds that are less viscous and with smaller molecular weights are more dangerous. There may be liver damage and the lymph nodes may be affected; heart inflammation can also occur at high doses.

TOXICITY AND IRRITATION

Not available. Refer to individual constituents.

Section 12 - ECOLOGICAL INFORMATION

No data

Ecotoxicity

Ingredient Persistence: Persistence: Air Bioaccumulation Mobility Water/Soil mineral oil No Data No Data No Data No Data Available Available Available Available No Data No Data naphtha petroleum, heavy, No Data No Data hydrotreated Available Available Available Available No Data Stoddard Solvent No Data No Data No Data Available Available Available Available paraffinic distillate, heavy, No Data No Data No Data No Data solvent- dewaxed (severe) Available Available Available Available

Section 13 - DISPOSAL CONSIDERATIONS

• Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area.

- A Hierarchy of Controls seems to be common the user should investigate:
- Reduction.
- DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- Where in doubt contact the responsible authority.
- Recycle wherever possible or consult manufacturer for recycling options.
- Consult State Land Waste Authority for disposal.
- Bury or incinerate residue at an approved site.
- · Recycle containers if possible, or dispose of in an authorised landfill.

Section 14 - TRANSPORTATION INFORMATION

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: UN, IATA, IMDG

Section 15 - REGULATORY INFORMATION

REGULATIONS

Regulations for ingredients

naphtha petroleum, heavy, hydrotreated (CAS: 64742-48-9,101795-02-2) is found on the following regulatory lists;

"GESAMP/EHS Composite List - GESAMP Hazard Profiles", "IMO IBC Code Chapter 17: Summary of minimum requirements", "IMO Provisional Categorization of Liquid Substances - List 3: (Trade-named) mixtures containing at least 99% by weight of components already assessed by IMO, presenting safety hazards", "International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs", "International Council of Chemical Associations (ICCA) - High Production Volume List", "International Fragrance Association (IFRA) Survey: Transparency List", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "OECD List of High Production Volume List", "Singapore Permissible Exposure Limits of Toxic Substances"

Stoddard Solvent (CAS: 8052-41-3,64742-47-8) is found on the following regulatory lists;

"ASEAN Cosmetic Directive Annex II Part 1:

List of substances which must not form part of the composition of cosmetic products", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "IMO IBC Code Chapter 17: Summary of minimum requirements", "IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances", "IMO Provisional Categorization of Liquid Substances - List 2: Pollutant only mixtures containing at least 99% by weight of components already assessed by IMO", "IMO Provisional Categorization of Liquid Substances - List 3: (Trade-named) mixtures containing at least 99% by weight of components already assessed by IMO, presenting safety hazards", "International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs", "International Air Transport Association (IATA) Dangerous Goods Regulations", "International Categorizetion Association (IATA) Dangerous Goods Regulations - Prohibited List Passenger and Cargo Aircraft", "International Concil of Chemical Associations (ICCA) - High Production Volume List", "International Fragrance Association (IFRA) Survey: Transparency List", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "OED List of High Production Volume (HPV) Chemicals", "OSPAR List of Chemicals for Priority Action", "OSPAR National List of Candidates for Substitution – Norway", "Singapore Fire Safety (Petroleum and Flammable Materials) - Licensable Products - Petroleum", "Singapore Odour Thresholds and Irritation Concentration of Chemicals", "Singapore Permissible Exposure Limits of Toxic Substances", "United Nations Consolidated List of Products Whose Consumption and/or Sale Have Been Banned, Withdrawn, Severely Restricted or Not Approved by Governments"

paraffinic distillate, heavy, solvent-dewaxed (severe) (CAS: 64742-65-0) is found on the following regulatory lists;

"ASEAN Cosmetic Directive Annex II Part 1:

List of substances which must not form part of the composition of cosmetic products", "OECD List of High Production Volume (HPV) Chemicals", "OSPAR National List of Candidates for Substitution – Norway", "OSPAR National List of Candidates for Substitution – United Kingdom"

No data for ENI ARNICA (ISO VG 46) (CW: 4778-98)

No data for mineral oil (CAS: , Not avail)

Section 16 - OTHER INFORMATION

INGREDIENTS WITH MULTIPLE CAS NUMBERS

Ingredient Name naphtha petroleum, heavy, hydrotreated Stoddard Solvent CAS 64742- 48- 9, 101795- 02- 2 8052- 41- 3, 64742- 47- 8

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references. A list of reference resources used to assist the committee may be found at: www.chemwatch.net/references.

■ The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings.

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. [ITALCO (Far East) Pte Ltd]

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