Safety Data Sheet
ZALI-SH

Safety Data Sheet dated 16/2/2017, version 1

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

1.1. Product identifier

Mixture identification:

Trade name: **ZALI-SH**

Trade code: ES00083-XXX-*

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

Recommended use:

anti-rust protective

1.3. Details of the supplier of the safety data sheet

Company:

ZALI snc di Zali Graziano & C.

Via Varallo 6 - 13027 SCOPA (VC) Italy - Tel e fax: +39 0163.53212

info@zali-precision.it

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP):

Warning, Flam. Liq. 3, Flammable liquid and vapour.

Warning, STOT SE 3, May cause drowsiness or dizziness.

Danger, Asp. Tox. 1, May be fatal if swallowed and enters airways.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:

Danger

Hazard statements:

H226 Flammable liquid and vapour.

H336 May cause drowsiness or dizziness.

H304 May be fatal if swallowed and enters airways.

Precautionary statements:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/...

P312 Call a POISON CENTER/ doctor/if you feel unwell.

P331 Do NOT induce vomiting.

P370+P378 In case of fire: Use ... to extinguish.

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

None

Contents:

Hydrocarbons C9-11 n-iso-alkanes cyclical <2% aromatic

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
>= 60% - < 70%	Hydrocarbons C9-11 n-iso-alkanes cyclical <2% aromatic	EC: 919-857-5 REACH No.: 01-2119463258-33	2.6/3 Flam. Liq. 3 H226 3.10/1 Asp. Tox. 1 H304 3.8/3 STOT SE 3 H336

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Injuries due to high pressure jets require a prompt surgical intervention and possibly a steroids therapy, to minimize tissue damage and loss of functions.
Every substance, in case of accidents with high pressure pipes or similar, can be accidentaly injected under skin tissue, even without external noticeable skin damage. In this case it's necessary to bring the injured as soon as possible to the hospital for required treatment.
Remove contaminated clothes after having started washing of affected body parts and wash thoroughly with water and soap. Immediately call a doctor if necessary.
Immediately take off all contaminated clothing.
Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.
Wash thoroughly the body (shower or bath).
Remove contaminated clothing immediately and dispose off safely.

In case of eyes contact:

Wash eyes immediately with plenty of water for some minute leaving eyelids open. Immediately call a doctor if pain and redness persists.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

In case of exposition to high concentration of vapours and mist remove person from the contaminated area and move to a well ventilated place. Call for medical attention if necessary.
Remove casualty to fresh air and keep warm and at rest.

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

None

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
Treatment:
None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Use class B fire extinguishing media: carbon dioxide, dry chemical powder, foam, sand, earth.
Extinguishing media which must not be used for safety reasons:
Avoid usage of water jets. Use water only to cool the surface of the container exposed to fire.
None in particular.

5.2. Special hazards arising from the substance or mixture

Avoid breathing the fumes of combustion as a result of fire can form compounds:
carbon (COx)
Do not inhale explosion and combustion gases.
Burning produces heavy smoke.

5.3. Advice for firefighters

Note: Cool with water all the containers not involved in fire but exposed to heat of fire, to avoid eventual explosion and propagation of fire.
Use suitable breathing apparatus .
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Move undamaged containers from immediate hazard area if it can be done safely.
Full protective suit equipped with respiratory equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes, using appropriate protective equipments.
In case of spillage of relevant quantities, most of all if in confined environment, avoid to breathe vapours and ventilate the environment, or use protective equipment for respiration.
Wear personal protection equipment.
Remove all sources of ignition.
Remove persons to safety.
See protective measures under point 7 and 8.

6.2. Environmental precautions

Avoid dispersion of the product and penetration in the soil, in the sewers or in surface water. If necessary inform competent local authorities.
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Stem in case of spillage of relevant quantities of product. Contains the spill of little quantities of product with earth, sand or other inert absorbing material. Transfer in appropriate impermeable containers, adequate for storage and transport of recovered material. Dispose according to current regulation.
Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid direct contact with the product.
Avoid to breathe aerosol or vapours of the product, ensuring an adequate ventilation of workplace, most of all if confined.
Don't smoke or use open flames; avoid contact with sparks or possible sources of ignition; do not keep open containers in the workplace, in order to avoid formation of highly concentrated vapours.

Avoid contact with skin and eyes, inhalation of vapours and mists.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
Contamined clothing should be changed before entering eating areas.
Do not eat or drink while working.
See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Maintain the product in original containers, stored in an environment and conditions such as is possible to ensure control and containment of leakage. Store in a cool place, away from any heat source or possible ignition and from exposure to sun light. Avoid accumulating electrostatic charge. Containers must be maintained closed. Ensure adequate ventilation of the room.
Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.
Do not pour the product into other containers. Always use the original container.
Keep away from food, drink and feed.
Incompatible materials:
None in particular.
Instructions as regards storage premises:
Cool and adequately ventilated.

7.3. Specific end use(s)

anti-rust protective

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No specific requirements in normal conditions of use.
No occupational exposure limit available

DNEL Exposure Limit Values

N.A.

PNEC Exposure Limit Values

N.A.

8.2. Exposure controls

Eye protection:

For more information refer to UNI-EN 166 standard.
Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

Use full suit and apron in suitable material; change immediately contaminated clothes and wash carefully before reuse.
It's advisable to maintain good personal and work clothes hygiene.
For more information refer to UNI-EN 465/466/467 standard.
Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Wear work gloves (for example in neoprene, nitrile or PVC), preferably with inner cover, resistant to mineral oils or solvents. Gloves must be changed when signs of wear are visible.
Wear gloves after an adequate cleaning of the hands.
In case of not prolonged contacts, use of barrier creams may be an useful protection equipment.
Wear work gloves (for example in neoprene, nitrile or PVC), preferably with inner cover, resistant to mineral oils or solvents. Gloves must be changed when signs of wear are visible.
Wear gloves after an adequate cleaning of the hands.
In case of not prolonged contacts, use of barrier creams may be an useful protection equipment.
Choice of protective gloves depends also on use conditions and needs to consider the information from the supplier.
For more information refer to UNI-EN 374 standard.
Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Whenever operational conditions and other equipment to limit workers exposure will be not adequate to respect exposure limits as specified in section 8, other protective equipments for

respiratory ways are needed: mask with filter for organic vapours and for dusts/mists (e.g. active carbon mask)
Not needed for normal use.

Thermal Hazards:
None

Environmental exposure controls:
None

Appropriate engineering controls:
None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	colorless clear liquid	--	--
Odour:	characteristic	--	--
Odour threshold:		--	--
pH:		--	--
Melting point / freezing point:		--	--
Initial boiling point and boiling range:	>158°C	--	--
Flash point:	>38 ° C	--	--
Evaporation rate:		--	--
Solid/gas flammability:		--	--
Upper/lower flammability or explosive limits:		--	--
Vapour pressure:		--	--
Vapour density:		--	--
Relative density:	0.811 Kg/l	--	--
Solubility in water:	<0.1% by weight	--	--
Solubility in oil:		--	--
Partition coefficient (n-octanol/water):		--	--
Auto-ignition temperature:	>200°C	--	--
Decomposition temperature:		--	--

Viscosity:		--	--
Explosive properties:	N/A	--	--
Oxidizing properties:	N/A	--	--

9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:		--	--
Fat Solubility:		--	--
Conductivity:		--	--
Substance Groups relevant properties		--	--

Viscosity at 40°C: 3,4 cst
VOC content 99/13/CE: 65 %

SECTION 10: Stability and reactivity

10.1. Reactivity
Avoid contact with strong acids and bases and strong oxidizers.
Stable under normal conditions
10.2. Chemical stability
Product is stable to room temperature.
Stable under normal conditions
10.3. Possibility of hazardous reactions
None
10.4. Conditions to avoid
Stable under normal conditions.
10.5. Incompatible materials
Avoid contact with combustible materials. The product could catch fire.
10.6. Hazardous decomposition products
None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Toxicological information of the mixture:
May cause moderate irritation.
General warning: high pressure injection of product in the skin can cause local necrosis if the product is not surgically removed.
Contact with product cause skin dryness.
Frequent and prolonged contacts can degrease and irritate the skin also causing dermatitis.
Main risk related to ingestion of the product is its aspiration into the lungs (even after spontaneous vomiting). In this case serious damage to lungs can happen.
Prolonged exposure to the product may cause drowsiness or dizziness.
Prolonged exposure to vapours or mist may cause respiratory irritation.

N.A.
Toxicological information of the main substances found in the mixture:
Hydrocarbons C9-11 n-iso-alkanes cyclical <2% aromatic
a) acute toxicity:
Test: LC50 - Route: Inhalation - Species: Rat > 4951.00000 mg/m3

Test: LD50 - Route: Oral > 5000.00000 mg/kg
Test: LD50 - Route: Skin - Species: Rabbit > 5000.00000 mg/kg

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

a) acute toxicity;
b) skin corrosion/irritation;
c) serious eye damage/irritation;
d) respiratory or skin sensitisation;
e) germ cell mutagenicity;
f) carcinogenicity;
g) reproductive toxicity;
h) STOT-single exposure;
i) STOT-repeated exposure;
j) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.
Hydrocarbons C9-11 n-iso-alkanes cyclical <2% aromatic

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia = 1000.00000 mg/l
Endpoint: EC50 - Species: Pseudokirchneriella subcapitata > 1000.00000 mg/l
Endpoint: LC50 - Species: Oncorynchus Mykyss > 1000.00000 mg/l
Endpoint: EC0 - Species: Daphnia = 1000.00000 mg/l

12.2. Persistence and degradability

Even if the product is not dangerous for the environment, the product is not readily biodegradable.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None
N.A.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose product (and emulsions in case of water-soluble lubrorefrigerants products) and containers sending it to approved companies, paying attention to obligations of DPR n.691 of 23/08/82 (Mandatory consortium for used oils) and Part IV of the Environmental code (D.Lgs. n. 152 of 3/4/2006) and updates
Don't discharge in sewers, tunnels or water courses. Follow current legal obligations.
Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.
Where applicable, refer to the following regulatory provisions : 91/156/EEC, 91/689/EEC, 94/62/EC and subsequent amendments.

SECTION 14: Transport information

14.1. UN number

ADR-UN Number:	3295
IATA-UN Number:	3295
IMDG-UN Number:	3295

14.2. UN proper shipping name

ADR-Shipping Name:	HYDROCARBONS, LIQUID, N.O.S.
IATA-Shipping Name:	HYDROCARBONS, LIQUID, N.O.S.
IMDG-Shipping Name:	HYDROCARBONS, LIQUID, N.O.S.

14.3. Transport hazard class(es)

ADR-Class:	3
ADR - Hazard identification number:	30
IATA-Class:	3
IMDG-Class:	3

14.4. Packing group

ADR-Packing Group:	III
IATA-Packing group:	III
IMDG-Packing group:	III

14.5. Environmental hazards

ADR-Enviromental Pollutant:	No
IMDG-Marine pollutant:	No

14.6. Special precautions for user

ADR-Subsidiary risks:	-
ADR-S.P.:	-
ADR-Tunnel Restriction Code:	3 (D/E)
IATA-Passenger Aircraft:	355
IATA-Subsidiary risks:	-
IATA-Cargo Aircraft:	366
IATA-S.P.:	A3 A224
IATA-ERG:	3L
IMDG-EmS:	F-E , S-D
IMDG-Subsidiary risks:	-
IMDG-Storage category:	Category A
IMDG-Storage notes:	-

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) 2015/830
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3
Restriction 40

Restrictions related to the substances contained:

No restriction.

Where applicable, refer to the following regulatory provisions :
Directive 82/501/EEC ('Activities linked to risks of serious accidents') and subsequent amendments.
Regulation (EC) nr 648/2004 (detergents).
1999/13/EC (VOC directive)
D.M. of 13 february 2003: third list of harmonized laws concerning the implementation of directive 89/686/CEE on personal protective equipment. D. Lgs. N. 81 of 9/4/2008: implementation of article 1 of Law 3 august 2007, n. 123, on health and security safeguard in the workplace.
D.M. 14 january 2008: List of diseases for which is mandatory a report according to article 139 of Testo Unico, approved with decree of the President of the Italian Republic 30 june 1965, n. 1124, and subsequent integrations. D.P.R. n. 689 of 26/05/1959: Determination of companies and processes subject to control of the Fire protection command, to enhance fire protection.
Directive 98/8/CE of 16 february 1998 on placing of biocidal products on the market.

Provisions related to directive EU 2012/18 (Seveso III):
N.A.
15.2. Chemical safety assessment
No

SECTION 16: Other information

Don't use this product for uses different from those identified. In this case user may be subject to risk not evaluated.

Text of phrases referred to under heading 3:
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H336 May cause drowsiness or dizziness.
This document was prepared by a competent person who has received appropriate training.
Main bibliographic sources:
ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold
CCNL - Appendix 1
The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.

INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
LTE:	Long-term exposure.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE:	Short-term exposure.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWATLV:	Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
WGK:	German Water Hazard Class.