

## Natural Force

### 1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

#### 1.1 Product Identifier

Material name : Natural Force

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

Product use : Multi-purpose foaming cleaner and degreaser.

#### 1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: IMG Ltd.,  
 Unit M  
 Riverside Industrial Estate  
 Fazeley  
 Tamworth  
 B78 3RW

Tel. : 01827 283322

Fax. : 01827 250143

Email (for SDSs) : sales@img-limited.co.uk

1.4 Emergency tel. no.: 01827 283322 (Available from 08.30-17.00 hours).

### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

According to 1272/2008/EC: Classification, Labelling and Packaging of Substances and Mixtures (CLP) Regulation:

Physical and Chemical Hazards	Flam.Aerosol 1; H222; H229
Human health	Sk.Irrit.2; H315; Sk.Sens.1; H317; Eye Irrit.2; H319
Environment	Aq.Chron.2; H411

#### 2.2 Label elements

Labelling according to EC Directives: 1272/2008/EC

Signal word: Danger Contains: d-Limonene, Potassium Hydroxide.

Pictogram(s):



H-Statements:	H222	Extremely flammable aerosol.
	H229	Pressurised container: may burst if heated.
	H315	Causes skin irritation.
	H317	May cause an allergic skin reaction.
	H319	Causes serious eye irritation.
	H411	Toxic to aquatic life with long lasting effects.
P-Statements:	P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
	P211	Do not spray on an open flame or other ignition source.
	P251	Pressurised container: Do not pierce or burn, even after use.
	P261	Avoid breathing vapour/spray.
	P271	Use only outdoors or in a well-ventilated area.
	P280	Wear protective gloves/protective clothing/eye protection/face protection
	P302+352	IF ON SKIN: Wash with soap and water.
	P332+313	If skin irritation occurs: Get medical advice/attention.

P-Statements (continued):

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P410+412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.  
 P501 Dispose of contents/container in accordance with national regulations.

Supplementary  
 Statements:

EUH208 Contains d-Limonene. May produce an allergic reaction.

**2.3 Other hazards** In use, may form flammable / explosive vapour-air mixture.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.2 Mixtures:

##### Hazardous components

Chemical Name	CAS No./ EC No./ Reg. No	Classification (1272/2008/EC)	Content
d-LIMONENE	5989-27-5 227-813-5 02-2119494323-37-0000	Flam Liquid 3; H226 Skin Irrit.2; H315 Skin Sens.1; H317 Aq. Chronic 1; H410	10-30%
POTASSIUM SILICATE	1312-76-1	Skin Corr. 1B; H314 Met. Corr. 1; H290	1-10%
BUTANE/ISOBUTANE	106-97-8 203-448-7 01-2119474691-32	Flam. Gas 1; H220	1-10%
POTASSIUM HYDROXIDE	1310-58-3 215-181-3	Acute Tox. 4; H302 Skin Corr. 1A; H314 Met. Corr. 1; H290	<1%

See Section 16 for the full text of the H-statements noted above.

(1272/2008/EC: Classification, Labelling and Packaging of Substances and Mixtures (CLP) Regulation).

### 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures

**General advice:** Remove casualty from exposure ensuring one's own safety whilst doing so. Take off any contaminated clothing and shoes/boots immediately. Never give anything by mouth to an unconscious person.

**Skin contact:** Wash with soap and water. Seek medical advice if irritation develops.

**Eye contact:** Rinse with water for 10 minutes and seek medical advice if irritation persists.

**Ingestion:** Rinse mouth with water and give water to drink. Do not induce vomiting. Seek medical advice.

**Inhalation:** Remove to fresh air. Seek medical advice.

**4.2 Most important symptoms and effects, both acute and delayed:** May cause irritation to skin and eyes with prolonged contact.

**4.3 Indication of any immediate medical attention and special treatment needed:** See skin and eye contact information above.

## 5. FIRE-FIGHTING MEASURES

### 5.1 Extinguishing media

Suitable extinguishing media: Carbon dioxide; dry chemical powder; alcohol or polymer foam.

Unsuitable extinguishing media: High volume water jet

### 5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting: Irritating/toxic fumes may be released at elevated temperatures.

### 5.3 Advice for fire-fighters:

Special protective equipment: Wear self-contained breathing apparatus. Use personal protective equipment.

Further information: Standard procedure for chemical fires. Use water spray to cool containers.  
Do not allow fire run-off to enter drains.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Use personal protective equipment to deal with spillage.

### 6.2 Environmental precautions

Contain the spillage using sufficient appropriate absorbent material. Do not discharge into drains or rivers, but if contamination to waterways has occurred, inform local authorities.

### 6.3 Methods and materials for containment and cleaning up

Wipe up liquid spillage with absorbent material such as sand, earth, or vermiculite, and place in a labelled container for disposal in accordance with local/national regulations.

**6.4 References to other sections:** See sections 8 and 13 for personal protection and disposal information.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling:** Avoid contact with skin and eyes. Handle with care.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, well ventilated area, below 50°C. Protect from frost, heat and sunlight. Keep away from food, drink and animal feed.

**7.3 Specific end use(s):** No information available.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

Chemical name	8hr TWA	15min STEL	Comments	Reference
d-Limonene	30 ppm	150 ppm	Recommended limit	Supplier
Potassium silicate	-	2 mg/m <sup>3</sup>	Recommended limit	Supplier
Potassium hydroxide	-	2 mg/m <sup>3</sup>		EH40/2005
Butane/Isobutane	1450 mg m <sup>-3</sup> /600ppm	1250 mg/m <sup>3</sup> /500 ppm		EH40/2005

### 8.2 Exposure controls

**Engineering measures:** Ensure there is sufficient ventilation of the area.

#### Personal protective equipment

**Respiratory protection:** If Workplace Exposure Limit(s) listed above are exceeded, respiratory protection may be required, in which case use respirators fitted with type B filters.

**Hand protection:** PVC, Neoprene or Nitrile Rubber gloves approved to EN374 standard; check with glove manufacturer for specific advice. Gloves should only be worn on clean hands. Replace worn gloves. Wash and dry gloves after use.

**Eye protection:** Tightly-fitting safety glasses or goggles approved to EN166 should be worn.

**Skin and body protection:** Protective overalls. The selected protective clothing has to satisfy the standard EN 13034, which describes clothing offering limited 8 hour protection against splashes.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practices. Do not eat or drink whilst using the product. Wash hands before breaks and at the end of the work day. Wash contaminated clothing before re-use.

**Environmental exposure controls:** Do not discharge into drains or rivers.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

State and colour	Aerosol emitting white foamy spray.
Odour	Citrus
Odour Threshold	No data available
Flammability	Extremely flammable
Flash point	-40°C
Lower explosion limit	0.8%
Upper explosion limit	9.0%
Explosive properties	Not explosive
Thermal decomposition	No data available
Auto-ignition temperature	No data available
Oxidising properties	Non-oxidising
Solubility in water	Miscible
Solubility in other solvents	Soluble in alcohols.
pH	12-13
Melting point/range	No data available
Boiling point/range	No data available
Density	1.06 (of liquid material)
Vapour pressure	No data available
Vapour density	No data available

### 9.1 Information on basic physical and chemical properties (continued)

Partition coefficient: n-octanol/water	No data available
Viscosity (kinematic)	Non-viscous
Evaporation rate	No data available

9.2 Other information	No data available
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## 10. STABILITY AND REACTIVITY

10.1 Reactivity	Generally non-reactive.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	None if stored and used as directed.
10.4 Conditions to avoid	None known.
10.5 Incompatible materials	Strong oxidising agents. Strong acids.
10.6 Hazardous decomposition products	Oxides of carbon.

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

Chemical name	Oral (LD50)	Inhalation (LC50)	Dermal (LD50)
d-Limonene	>4300-5500 mg/kg (Rat)	>1000 mg/kg (Mouse)	>5000 mg/kg (Rabbit)
Potassium silicate	>2000 mg/kg (Rat)	No data	>5000 mg/kg (Rabbit)
Potassium hydroxide	365 mg/kg (Rat)	No data	No data
Butane/Isobutane	Not applicable	>20mg/l (Rat) 4h	Not applicable

<b>Skin corrosion/irritation:</b>	d-Limonene: Irritating to skin. Potassium silicate and potassium hydroxide are present at quite low levels but may still be irritating to skin.
<b>Serious eye damage/eye irritation:</b>	d-Limonene: May be irritating to eyes. Potassium silicate and potassium hydroxide: Irritating to eyes.
<b>Respiratory or skin sensitisation:</b>	d-Limonene: May cause sensitisation in some individuals.
<b>Repeated dose toxicity:</b>	No data available.
<b>Carcinogenicity:</b>	No known carcinogenic effects.
<b>Mutagenicity:</b>	Not mutagenic
<b>Toxicity for reproduction:</b>	d-Limonene: at levels above 3000 mg/kg, some developmental abnormalities were seen in studies of mice.
<b>Specific target organ toxicity (STOT):</b>	No data available.

#### Further information

The product as a whole may cause irritation of skin, eyes, nose and upper respiratory tract if exposed to high levels of spray mist.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

Chemical name	Species	Test	Value
d-Limonene	Daphnia	EC50 48h	0.4 mg/l
	Fish	LC50 48h	33 mg/l
	Algae	EC50 72h	4 mg/l

### 12.2 Persistence and degradability

d-Limonene: quickly biodegrades in water and presents little or no toxic hazard to waterways, water treatment plants or the environment.

Potassium silicate rapidly breaks down and is indistinguishable from natural dissolved silica and potassium hydroxide is biodegradable.

### 12.3 Bioaccumulative potential

No data available.

### 12.4 Mobility in soil

Low to very low mobility through soil.

### 12.5 Results of PBT and vPvB assessment

Contains no PBT or vPvB substances.

### 12.6 Other adverse effects

None.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

Disposal operations: Dispose of in accordance with local and national regulations.

Contact licensed waste disposal company. Most aerosols can be recycled.

Do not pierce or burn or use a cutting torch on the empty aerosol container.

## 14. TRANSPORT INFORMATION

General Information: The UN number for all aerosols is 1950. Aerosols packed in fibreboard cartons up to 30 kg gross weight, or shrink/stretch wrapped onto trays up to 20 kg gross weight may be transported as Limited Quantities, and should display the following symbol on the pack:



The following information relates to all other aerosols not transported as Limited Quantities:

**14.1 UN number:** ADR/RID/ADN; IMDG; ICAO: 1950

**14.2 UN proper shipping name:** AEROSOLS

**14.3 Transport hazard class(es):** ADR/RID/ADN Class: 2, 5F

ADR/RID/ADN Class: Class 2, Gases

ADR Label No.: 2.1

IMDG Class: 2

ICAO Class/Division: 2

ICAO Subsidiary risk: 2.1



Transport labels

**14.4 Packing Group:** ADR/RID/ADN; IMDG; ICAO: Not applicable for aerosols

**14.5 Environment hazards:** Marine Pollutant: Not applicable for aerosols.

**14.6 Special precautions for user:** EMS: F-D,S-U

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** Not applicable for aerosols.

## 15. REGULATORY INFORMATION

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

#### UK Regulatory References

The Control of Substances Hazardous to Health Regulations 2002 (S.I 2001 No.2677) with amendments.

#### EU Directives

Regulations (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. Regulation EU 453/2010 amending Regulation (EC) No 1907/2006.

#### Statutory Instruments

The Chemicals (Hazard information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

#### Guidance Notes

Health and Safety Executive Workplace Exposure Limits EH40.

Volatile Organic Compounds (VOC) content: 123 g/l. (Directive 1999/13/EC)

### 15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been performed on this product.

### 16. OTHER INFORMATION

This safety data sheet is prepared in accordance with Regulation (EC) No 1907/2006 (REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals) as amended and Regulation EU 453/2010.

Tariff number: 34029090.

#### Full text of H-statements referred to under sections 2 and 3

- H220 Extremely flammable gas.
- H226 Flammable liquid and vapour.
- H290 May be corrosive to metals.
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H410 Very toxic to aquatic life with long lasting effects.

#### Abbreviations and acronyms

- CAS: Chemical Abstract Service (division of the American Chemical Society). {Section 3}.
- STOT: Single Target Organ Toxicity (Section 11).
- TWA: Time-weighted average. (Section 8).
- STEL: Short-term exposure limit. (Section 8).
- PBT: Persistent, Bioaccumulative, Toxic. (Section 12).
- vPvB: very Persistent and very Bioaccumulative. (Section 12).
- EC50: Effective Concentration, 50 percent. (Section 12).
- LC50: Lethal Concentration, 50 percent. (Section 11/12).
- LD50: Lethal Dose, 50 percent. (Section 11).

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.