

1 IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY

1.1 Product identifier

Product Name: **Force**

**1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses:**

Cleaner and degreaser - For professional use only

Uses advised against:

Uses other than those identified are not recommended

1.3 Details of the supplier of the safety data sheet

Company Name: Gannon Chemicals Ltd
Ballindine, Claremorris
Co. Mayo, Ireland
Email address of SDS author: paul@gannonchemicals.ie
Emergency Phone Number: 094 9364011 DAY (Mon – Fri 9am to 5.30pm)

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Eye Damage (Category 1), H318

Skin irritation (Category 2), H315

For the 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

Xi Irritant R36

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

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word **Danger**

Hazard statement(s)

H318 - Causes serious eye damage.

H315 Causes skin irritation

Precautionary statement(s)

P280 - Wear protective gloves, protective clothing and eye or face protection.

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

Supplemental Hazard none

Labelling according Regulation 67/548/EEC or 1999/45/EC

Xi - Irritant

Risk phrases:

R36 - Irritating to eyes.

R38 - Irritating to skin.

Safety phrases:

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Further indications on the label:

Rinse and dry hands after use. For prolonged contact, protection for the skin may be necessary.

R36 - Irritating to eyes.

2.3 Other hazards

No other hazards known. The product does not meet the criteria for PBT or vPvB in accordance with Regulation (EC) No 1907/2006, Annex XIII.

3 COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixtures

Product/Ingredient Name	CAS No.	Weight %	Classification 67/548/EEC	Regulation (EC) No 1272/2008 [CLP]
Sodium Metasilicate	6834-92-0	1-5	C: R34 - R37	Skin Corr. 1B (H314) STOT SE 3 (H335) Met. Corr. 1 (H290)
Sodium Hydroxide	1310-73-2	1-5	C, R35	Met. Corr. 1; H290 Skin Corr. 1A; H314: C ≥ 5 % Skin Corr. 1B; H314: 2 % ≤ C < 5 % Skin Irrit. 2; H315: 0,5 % ≤ C < 2 % Eye Irrit. 2; H319: 0,5 % ≤ C < 2 %
Alkyl alcohol ethoxylate	68439-46-3	5-10	Xn: R22-41	Acute Tox. 4 (oral) Eye Dam./Irrit. 1 H318, H302
Quaternary C12-14 alkyl methyl amine ethoxylate methyl chloride	1554325-20-0	5-10	Xn; R22 Xi; R38-R41	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318
Reaction mass of (2S)-Alanine, N,N-bis(carboxymethyl)-, trisodium salt and (2R)-Alanine, N,Nbis (carboxymethyl)-, trisodium salt	Mixture	5-10	No hazard warning required	Met. Corr. 1. H 290

4 FIRST AID MEASURES

4.1 Description of first aid measures**General Advice:**

Remove contaminated clothing immediately

In case of skin (or hair) contact:

Remove/Take off immediately all contaminated clothing.

Rinse skin with water/shower (P303+P361+P353).

Seek medical attention if irritation persists

In case of eye contact:

Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing (P305+P351+P338).

Irrigate eyes thoroughly whilst lifting eyelids

Obtain immediate medical attention

If inhaled:

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P341).
When in doubt or symptoms persist, seek medical attention

If swallowed:

Rinse mouth.
Do NOT induce vomiting (P301+P330+P331).
Never give anything by mouth to an unconscious person
Give water or milk to drink

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: Eye irritation, skin irritation

4.3 Indication of any immediate medical attention and special treatment needed

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5 FIRE FIGHTING MEASURES

5.1 Extinguishing media:

Not flammable. In case of fire use extinguishing media (Carbon dioxide. Dry powder. Water spray jet), appropriate to surrounding conditions. Fight larger fires with water spray jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture

No special hazards known. However as smoke from fires is irritating. Take precautions to protect personnel from exposure.

5.3 Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

5.4 Additional information

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Information regarding personal protective measures see, chapter 8.

6.2 Environmental precautions

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

For large amounts: Pump off product.
For residues: Pick up with suitable absorbent material. Dispose of absorbed material in accordance with regulations.

6.4 Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Measures to prevent fire and explosions:

No special precautions required.

Measures required to protect the environment:

For environmental exposure controls see subsection 8.2.

General precautions:

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Wash hands before breaks and at the end of workday. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Wash

7.2	Conditions for safe storage, including any incompatibilities	contaminated clothing before reuse. Use personal protective equipment as required. Avoid contact with skin and eyes. Use only with adequate ventilation. Store at normal room temperature and keep container tightly closed. Keep out of reach of children. No special precautions necessary for protection against fire and explosion. Store away from strong acids.
7.3	Specific end uses	No specific advice for end use available.

8 EXPOSURE CONTROLS AND PERSONAL PROTECTION
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8.1. Control parameters

Components with occupational exposure limits
No occupational exposure limits known.

8.2. Exposure controls

The following information applies for the uses indicated in subsection 1.2. If available, please refer to the product information sheet for application and handling instructions. Normal use conditions are assumed for this section.

Recommended safety measures for handling the undiluted product: Covering activities such as filling and transfer of product to application equipment, flasks or buckets

If the product is diluted by using specific dosing systems with no risk of splashes or direct skin contact, the personal protection equipment as described in this section is not required.

Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

Respiratory protection:

Respiratory protection in case of vapour/aerosol release. Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

Hand protection:

Chemical resistant protective gloves (EN 374)

Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): nitrile rubber (NBR) - 0.4 mm coating thickness.

Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.

Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:

Safety glasses or goggles (EN 166). The use of a full-face shield or other full-face protection is strongly recommended when handling open containers or if splashes may occur.

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures

Wearing of closed work clothing is recommended. Handle in accordance with good industrial hygiene and safety practice.

Respiratory protection:

No special requirements under normal use conditions.

Recommended safety measures for handling the diluted product

Recommended maximum concentration (%): 5

Appropriate engineering controls:

Use only in well ventilated areas.

Appropriate organisational controls:

No special requirements under normal use conditions.

Personal protective equipment

Eye / face protection:

Safety glasses are not normally required. However, their use is recommended in those cases where splashes may occur when handling the product.

Hand protection:

Rinse and dry hands after use. For prolonged contact protection for the skin may be necessary.

Body protection:

No special requirements under normal use conditions.

Respiratory protection:

No special requirements under normal use conditions.

Environmental exposure controls:

No special requirements under normal use conditions.

9 PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

(a)	Form	Liquid
(b)	Colour	Green
(c)	Odour	Faint
(d)	pH value(1% solution)	12.5
(e)	Melting point/range (°C):	Not Determined
(f)	Initial boiling point/range (°C):	Not Determined
(g)	Decomposition temperature (°C)	Not Determined
(h)	Flash point (°C):	Not Applicable
(i)	Ignition temperature (°C)	Not Determined
(j)	Vapour pressure (hPa) at ...°C)	Not Determined
(k)	Vapour density (air=1)	Not Determined
(l)	Density (g/cm ³) at 20°C	1.05
(m)	Bulk density (kg/m ³)	Not Determined
(n)	Water solubility (20°C in g/l)	Completely
(o)	Solubility(ies):	Not Determined
(p)	Partition coefficient	Not Determined
(q)	Viscosity, dynamic (mPa s):	Not Determined

9.2 Other information

Incompatible with strong acids

10 STABILITY AND REACTIVITY**10.1 Reactivity**

No hazardous reactions if stored and handled as prescribed/indicated.

10.2 Chemical stability

The product is stable if stored and handled as prescribed/indicated.

10.3 Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions.

10.4 Conditions to avoid

See MSDS section 7 - Handling and storage.

10.5 Incompatible materials

Substances to avoid: Halogens, Acids, Reactive Chemicals

10.6 Hazardous decomposition products

No hazardous decomposition products known.

11 TOXICOLOGICAL INFORMATION

11.2.2 Mixtures

No test data is available on the mixture.

Substance data, where relevant and available, are listed below

Substance	Acute toxicity	Skin corrosion/irritation	Serious eye damage/eye irritation	Respiratory or skin sensitisation
Sodium Metasilicate	LD50 Oral - rat - 1,152 - 1,349 mg/kg	Skin - rabbit Result: Corrosive - 4h	No Data Available	in vivo assay - mouse Result: Does not cause skin sensitisation.
Sodium Hydroxide	Toxic Dose 1 – LD 50 - 325 mg/kg (oral rat)	Skin - rabbit Result: Causes severe burns. - 24 h	Eyes - rabbit Result: Corrosive - 24 h	Will not occur
Alkyl alcohol ethoxylate	Experimental/calculated data: LD50 rat (oral): > 300 - 2,000 mg/kg	Experimental/calculated data: Skin corrosion/irritation rabbit: non-irritant	Serious eye damage/irritation rabbit: irreversible damage	Experimental/calculated data: Guinea pig maximization test guinea pig: Non-sensitizing
Quaternary C12-14 alkyl methyl amine ethoxylate methyl chloride	Acute oral toxicity: Acute toxicity estimate: 833.33 mg/kg Method: Calculation method	Skin corrosion/irritation rabbit: Irritant	Eye contact causes irritation.	Does not cause skin sensitisation
Reaction mass of (2S)-Alanine, N,N-bis(carboxymethyl)-, trisodium salt and (2R)-Alanine, N,Nbis(carboxymethyl)-, trisodium salt	Experimental/calculated data: LD50 rat (oral): > 4,000 mg/kg	Skin corrosion/irritation rabbit: non-irritant	Serious eye damage/irritation rabbit: Non Irritant	Guinea pig maximization test: No sensitizing effect.

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.

12 ECOLOGICAL INFORMATION

Substance	Toxicity	Persistence and Degradability	Bioaccumulative potential	Mobility in soil
Sodium Metasilicate	Toxicity to fish semi-static test LC50 - Danio rerio (zebra fish) - 210 mg/l - 96 h	No Data Available	No Data Available	No Data Available
Sodium Hydroxide	LC50 - Oncorhynchus mykiss (rainbow trout) - 45.4 mg/l - 96 h	The methods for determining the biological degradability are not applicable to inorganic substances	The product is not bioaccumulating.	No Data Available
Alkyl alcohol ethoxylate	Acutely harmful for aquatic organisms.	Elimination information: >= 90 % Bismuth-active substance. Readily biodegradable	Accumulation in organisms is not to be expected.	The substance will not evaporate into the atmosphere from the water surface.

				Adsorption to solid soil phase is possible.
Quaternary C12-14 alkyl methyl amine ethoxylate methyl chloride	Toxicity to fish: LC50: > 10 - 100 mg/l Exposure time: 96 h Species: Fish EC50: > 1 - 10 mg/l Exposure time: 48 h Species: Daphnia	Assessment biodegradation and elimination (H2O): Readily biodegradable	Significant accumulation in organisms is not to be expected.	The substance will not evaporate into the atmosphere from the water surface. Adsorption to solid soil phase is possible.
Reaction mass of (2S)-Alanine, N,N-bis(carboxymethyl)-, trisodium salt and (2R)-Alanine, N,Nbis(carboxymethyl)-, trisodium salt	:	Readily biodegradable. 80 - 90 % BOD of the ThOD (28 d)	Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.	The substance will not evaporate into the atmosphere from the water surface. Adsorption to solid soil phase is not expected.

Results of PBT and vPvB assessment

The product does not fulfil the criteria for PBT (Persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative).

13 DISPOSAL

This product does not contain any prescribed substance under the Environmental Protection Act (Prescribed Processes and Substances) Regulations 1991 and is not classified as special waste under the Control of Substances (Special Waste) Regulations 1996, but is classified as controlled waste under the Environmental Protection Act 1990. For small quantities, dilute with water to at least 2.5% w/v (25 g/litre) and pour down a wastewater drain (foul sewer). Rinse out containers at least twice and recycle if facilities exist or dispose of as commercial waste. For larger quantities dispose of safely as commercial waste. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

Empty packaging

Dispose of observing national or local regulations.

Suitable cleaning agents:

Water, if necessary with cleaning agent.

14 TRANSPORT INFORMATION

ADR, RID, ADN, IMO/IMDG, ICAO/IATA

14.1 UN number: Non-dangerous goods

14.2 UN proper shipping name: Non-dangerous goods

14.3 Transport hazard class(es): Non-dangerous goods

14.4 Packing group: Non-dangerous goods

14.5 Environmental hazards: Non-dangerous goods

14.6 Special precautions for user: Non-dangerous goods

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: The product is not transported in bulk tankers.

15 REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006

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

Authorisations or restrictions (Regulation (EC) No 1907/2006, Title VII respectively Title VIII): Not applicable.

Ingredients according to EC Detergents Regulation 648/2004

Amphoteric surfactants, anionic surfactants, non-ionic surfactants 5 – 15%

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

16	OTHER INFORMATION
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This information is based on our present state of knowledge. It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for a particular application.

Classification procedure

The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11 for toxicological information and section 12 for ecological information.

Abbreviations and acronyms:

- STOT - Specific Target Organ Toxicity
- DNEL - Derived No Effect Limit
- EUH - CLP Specific hazard statement
- PBT - Persistent, Bioaccumulative and Toxic
- PNEC - Predicted No Effect Concentration
- REACH number - REACH registration number, without supplier specific part
- vPvB - very Persistent and very Bioaccumulative
- ATE - Acute Toxicity Estimate

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