

SAFETY DATA SHEET

DROMUS™ B

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2015/830 - Finland

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

1.1 Product identifier

Product code : 42002222
Product name : DROMUS™ B

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

Relevant uses : Metalworking fluid, Cutting fluid

Uses advised against : Any other purpose.

1.3 Details of the supplier of the safety data sheet

Supplier : Quaker Chemical B.V.
Industrieweg 7, 1422 AH Uithoorn
The Netherlands
T:+31 (0) 297 544644

ProductStewardship-EMEA@quakerhoughton.com
www.quakerhoughton.com

1.4 Emergency telephone number

Telephone number : CHEMTREC Finland: +(358)-942419014
Open 24 hours a day

0800 147 111 (the call is free of charge)

09 471 977

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Eye Irrit. 2, H319

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

2.2 Label elements

SECTION 2: Hazards identification

Hazard pictograms :



Signal word :

Warning

Hazard statements :

H319 - Causes serious eye irritation.

Precautionary statements

Prevention :

P280 - Wear eye or face protection.

Response :

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 - If eye irritation persists: Get medical advice or attention.

Storage :

Not applicable.

Disposal :

Not applicable.

Supplemental label elements :

Repeated exposure may cause skin dryness or cracking.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification

: None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

: Mixture

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type
Mineral oil	EC: ** CAS: **	≥50 - ≤75	Not classified.	[2]
Sulfonic acids, petroleum, sodium salts	EC: 271-781-5 CAS: 68608-26-4	≤5	Eye Irrit. 2, H319	[1]
sodium/triethanolamine 4-(2-hydroxyethyl)amino	REACH #: 01-2119979554-22	≤3	Skin Irrit. 2, H315 Eye Dam. 1, H318	[1]
-3-pentapropenyl-4-oxobutanoate	CAS: 1424149-03-0	≤3	Eye Dam. 1, H318	[1]
Amides, C12-18 and C18-unsatd., N-(hydroxyethyl), ethoxylated	EC: 500-350-9 CAS: 157707-44-3	≤3	Eye Dam. 1, H318	[1]
Alkali neutralized carboxylic acid	CAS: -	≤3	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
			For full text of H-statements: see SECTION 16	

** May contain

: 265-155-0 (01-2119467170-45)

The mineral oils in the product contain < 3% DMSO extract (IP 346).

Type

SECTION 3: Composition/information on ingredients

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice** : Get medical attention. If medical advice is needed, have product container or label at hand. Use personal protective equipment as required. Remove contaminated clothing and wash it before reuse. Wash skin surfaces thoroughly after contact.
- Inhalation** : Move affected person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and wash it before reuse. Get medical attention if symptoms occur.
- Eye contact** : Flush with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses, if present and easy to do. Get medical attention if symptoms occur.
- Ingestion** : Ingestion may cause gastrointestinal irritation and diarrhea. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

- Inhalation** : Not expected under normal use.
- Skin contact** : Defatting to the skin.,dryness,cracking
- Eye contact** : pain or irritation,redness,watering
- Ingestion** : Not expected under normal use.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat symptomatically.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Use personal protective equipment as required.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire. Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Hazardous combustion products** : In a fire, hazardous decomposition products may be produced. carbon oxides (CO, CO₂) nitrogen oxides sulfur oxides metal oxide/oxides

SECTION 5: Firefighting measures

5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : 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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Put on appropriate personal protective equipment (see Section 8). Keep unnecessary personnel away. Avoid breathing vapor or mist. Provide adequate ventilation.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". Evacuate area.

- 6.2 Environmental precautions** : Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Do not allow any potentially contaminated water, including rain water, runoff from fire fighting or spills, to enter any waterway, sewer or drain.

6.3 Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Absorb with an inert 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. For large spills, dike spilled material or otherwise contain it to ensure runoff does not reach a waterway. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

- 6.4 Reference to other sections** : See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

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. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

- Storage temperature** : Store between the following temperatures: 5 to 40°C (41 to 104°F).

SECTION 7: Handling and storage

7.3 Specific end use(s)

Recommendations : Observe technical data sheet/instructions for use.

Industrial sector specific solutions : Observe technical data sheet/instructions for use.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
Mineral oil	Institute of Occupational Health, Ministry of Social Affairs (Finland, 6/2018). TWA: 5 mg/m ³ 8 hours. 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 other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
Sulfonic acids, petroleum, sodium salts	DNEL	Long term Inhalation	0.33 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	0.66 mg/m ³	Workers	Systemic
	DNEL	Long term Oral	0.8333 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	1.667 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	3.33 mg/kg bw/day	Workers	Systemic
sodium/triethanolamine 4-(2-hydroxyethyl)amino-3-pentapropenyl-4-oxobutanoate	DNEL	Short term Inhalation	1 mg/m ³	Workers	Local
	DNEL	Long term Inhalation	1 mg/m ³	Workers	Local
	DNEL	Long term Dermal	2.5 mg/kg bw/day	Workers	Systemic

PNECs

No PNECs available.

8.2 Exposure controls

SECTION 8: Exposure controls/personal protection

- Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Engineering controls should be considered as the first line of protection against adverse exposure to harmful substances. Administrative controls and PPE should be used in the absence of engineering controls or as supplemental controls where engineering controls are insufficient in reducing specific exposures to an acceptable level
- Individual protection measures**
- Eye/face protection** : Use eye protection according to EN 166, designed to protect against liquid splashes. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields
- Skin protection**
- Hand protection** : The following glove type may be suitable for handling this product Protective gloves complying with EN374
- | | | |
|----------------|----------------------------------|---|
| nitrile rubber | Glove Thickness : ≥ 0.38 mm | Break through time : ≥ 480 minutes |
| butyl rubber | Glove Thickness : ≥ 0.64 mm | Break through time : ≥ 480 minutes |
- The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Always ensure that gloves are free from defects and that they are stored and used correctly. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.**
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Wear work clothing with long sleeves.
- Respiratory protection** : No personal respiratory protective equipment normally required. In case of inadequate ventilation wear respiratory protection. If heated and ventilation is inadequate, use respirator which will protect against organic vapor and dust/mist. Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification.
- This information is based on the state in which the specific product is delivered and on the intended use specified within this SDS. This information is provided based on literature reference, manufacturer specifications and recommendations and/or derived by analogy with similar substances. The level of protection and types of exposure controls will vary depending on potential exposure conditions.**
- 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. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. 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. Ensure regular inspection, cleaning and maintenance of equipment and machines.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
- Thermal hazards** : Not expected under normal use. Not relevant/applicable due to nature of the product.

Section 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	: Liquid.
Color	: Opaque., Light brown.
Odor	: Mild.
Odor threshold	: Not available.
pH	: 10.1
Melting point/freezing point	: Not available.
Initial boiling point and boiling range	: >100°C
Flash point	: Open cup: >100°C
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Upper/lower flammability or explosive limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 0.92
Solubility(ies)	: Emulsifies.
Solubility in water	: Not available.
Partition coefficient: n-octanol/ water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic (40°C (104°F)): 0.5 cm ² /s (50 cSt)
Explosive properties	: Not applicable.
Oxidizing properties	: Not applicable.

9.2 Other information

VOC content	: 41 g/l
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SECTION 10: Stability and reactivity

10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: The product is stable.
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	: No specific measures identified.
10.5 Incompatible materials	: Strong oxidizing materials. strong acids. strong alkalis
10.6 Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity : Based on available data, the classification criteria are not met.

Numerical measures of toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Sulfonic acids, petroleum, sodium salts	LD50 Dermal	Rabbit	>500 mg/kg	-
sodium/triethanolamine 4-(2-hydroxyethyl)amino)-3-pentapropenyl-4-oxobutanoate	LD50 Oral	Rat	>2000 mg/kg	-
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-

Irritation/Corrosion : Causes severe eye irritation.

Sensitization : Based on available data, the classification criteria are not met.

Mutagenicity : Based on available data, the classification criteria are not met.

Carcinogenicity : Based on available data, the classification criteria are not met.

Reproductive toxicity : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure) : Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure) : Based on available data, the classification criteria are not met.

Aspiration hazard : Based on available data, the classification criteria are not met.

Other information : None identified.

Information on the likely routes of exposure

Inhalation : No known significant effects or critical hazards.

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

Eye contact : Causes serious eye irritation.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : Not expected under normal use.

Skin contact : Defatting to the skin.,dryness,cracking

Eye contact : pain or irritation,redness,watering

Ingestion : Not expected under normal use.

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

None identified.

SECTION 12: Ecological information

12.1 Toxicity

No known significant effects or critical hazards.

SECTION 12: Ecological information

Product/ingredient name	Result	Species	Exposure
Sulfonic acids, petroleum, sodium salts sodium/triethanolamine 4-(2-hydroxyethyl)amino)-3-pentaproyl-4-oxobutanoate	Acute EC50 >100 mg/l	Algae - Desmodesmus subspicatus	72 hours
	Acute EC50 >1000 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC50 >1000 mg/l	Fish - Pimephales promelas	96 hours
	Acute EC50 159 mg/l	Algae - Desmodesmus subspicatus	72 hours
	Acute EC50 11.8 mg/l Acute LC50 58 mg/l	Daphnia - Daphnia magna Fish - Brachydanio rerio	48 hours 96 hours

12.2 Persistence and degradability

Not available.

12.3 Bioaccumulative potential

Not available.

12.4 Mobility in soil

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

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Disposal methods : 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Empty containers or liners may retain some product residues. Empty containers retain product residue and can be hazardous. Care should be taken when handling emptied containers that have not been cleaned or rinsed out.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-
14.3 Transport hazard class(es)	-	-	-

SECTION 14: Transport information

14.4 Packing group	-	-	-
14.5 Environmental hazards	No.	No.	No.

Additional information

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to IMO instruments : Not available.

SECTION 15: Regulatory information

15.1 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

Annex XIV

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

Substances of very high concern

This product does not contain candidate substances of very high concern at a concentration => 0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Other EU regulations

Ozone depleting substances (1005/2009/EU)

None of the components are listed.

Prior Informed Consent (PIC) (649/2012/EU)

None of the components are listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

National regulations

NACE : Not available.

UC62 : Not available.

International regulations

Montreal Protocol

None of the components are listed.

Stockholm Convention on Persistent Organic Pollutants

None of the components are listed.

Rotterdam Convention on Prior Informed Consent (PIC)

None of the components are listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

None of the components are listed.

SECTION 15: Regulatory information

15.2 Chemical Safety Assessment : A chemical safety assessment according to regulation (EC) No. 1907/2006 is not required

SECTION 16: Other information

✔ Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 DMEL = Derived Minimal Effect Level
 DNEL = Derived No Effect Level
 EUH statement = CLP-specific Hazard statement
 N/A = Not available
 PBT = Persistent, Bioaccumulative and Toxic
 vPvB = Very Persistent and Very Bioaccumulative
 PNEC = Predicted No Effect Concentration
 RRN = REACH Registration Number
 SGG = Segregation Group

Key literature references and sources for data : CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006]
 Commission Regulation (EU) No 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
 ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
 Safety data sheets of raw materials, global regulatory body information, scientific literature, and testing data .

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

Classification	Justification
Eye Irrit. 2, H319	Expert judgment

Full text of classifications [CLP/GHS]

H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
EUH066	Repeated exposure may cause skin dryness or cracking.

Eye Dam. 1	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2

Training advice : **Users of this product should be provided the information in this safety data sheet, including possible hazards, safe handling, and proper use of chemical products.**

Version : 2.01

Disclaimer

This product's safety information is provided to assist our customers in assessing compliance with safety/health/environmental regulations. The information contained herein is based on data available to us and is correct to the best of our knowledge, information and belief at the date of its publication. However, no warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of this data, the results to be obtained from the use thereof, or the hazards connected with the use of the product. Since the use of this product is within the exclusive control of the user, it is the user's obligation to determine the conditions for safe use of the product. Such conditions should comply with all regulations concerning the product. The company referenced in this Safety Data Sheet assumes no liability for any injury or damage, direct or consequential, resulting from the use of this product unless such injury or damage is attributable to the gross negligence of such company.