

SAFETY DATA SHEET

IMMUNOL 1228-2

SDS according to the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200), Revision 2012

Section 1. Identification

Product code : 206785-01
Product name : IMMUNOL 1228-2
Other means of identification : Not available.

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

Relevant uses : Not available.
Uses advised against : Any other purpose.

Supplier : Quaker Houghton PA, Inc.
901 E. Hector Street
Conshohocken, PA 19428 USA
T: 610-832-4000

Wallover Oil Company
21845 Drake Road
Strongsville, OH 44149 USA
www.wallover.com
T: (440) 238-9250

ProductStewardship@quakerhoughton.com
www.quakerhoughton.com

Emergency telephone number (with hours of operation) : CHEMTREC US/Canada:1-800-424-9300 or 1-703-527-3887 (24 hours)

Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

GHS label elements

Signal word : No signal word.
Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Section 2. Hazards identification

Prevention	: Not applicable.
Response	: Not applicable.
Storage	: Not applicable.
Disposal	: Not applicable.
Hazards not otherwise classified	: None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
sodium nitrite	≤5	7632-00-0

The exact percentage (concentration) of composition has been withheld as a trade secret

Section 4. First aid measures

Description of necessary first aid measures

General advice	: Get medical attention if symptoms occur. 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.
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.
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.

Most important symptoms and effects, both acute and delayed

Inhalation	: Not expected under normal use.
Skin contact	: Not expected under normal use.
Eye contact	: Not expected under normal use.
Ingestion	: Not expected under normal use.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
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. Fire-fighting measures

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.
- Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Hazardous thermal decomposition products** : In a fire, hazardous decomposition products may be produced. carbon oxides (CO, CO₂) nitrogen oxides metal oxide/oxides
- 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.

Section 6. Accidental release measures

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.
- 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".
- 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.

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.

Section 7. Handling and storage

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.

Section 7. Handling and storage

- 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.
- 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** : Not available.
- Shelf life** : 3 years

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
sodium nitrite	None.

- 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.
- 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.

Individual protection measures

- 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. Keep equipment clean.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Other skin protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. 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.
- Respiratory protection** : A respirator is not needed under normal and intended conditions of product use. Use appropriate respiratory protection if there is a risk of exceeding any exposure limits.

Section 8. Exposure controls/personal protection

Thermal hazards : Not expected under normal use. Not relevant/applicable due to nature of the product.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid.
Color : Translucent. Clear.
Odor : Not available.
Odor threshold : Not available.
pH : 9 to 9.4
Melting point : 0°C (32°F)
Boiling point : 101.1°C (214°F)
Flash point : Open cup: Not applicable.
Evaporation rate : <1 (butyl acetate = 1)
Flammability (solid, gas) : Not available.
Lower and upper explosive (flammable) limits : Not available.
Vapor pressure : 2.3 kPa (17.5 mm Hg) [room temperature]
Vapor density : >1 [Air = 1]
Relative density : 1.05
Solubility : Not available.
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)): Not applicable.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific measures identified.

Incompatible materials : Strong oxidizing materials. strong acids. strong alkalis

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

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

Acute toxicity estimates

Route	ATE value
Oral	3719.01 mg/kg

Numerical measures of toxicity

Product/ingredient name	Result	Species	Dose	Exposure
sodium nitrite	LD50 Oral	Rat	180 mg/kg	-

Irritation/Corrosion : Based on available data, the classification criteria are not met.

Product/ingredient name	Result	Species	Score	Exposure	Observation
sodium nitrite	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-

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 : No known significant effects or critical hazards.

Eye contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

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

None identified.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : Not expected under normal use.

Skin contact : Not expected under normal use.

Eye contact : Not expected under normal use.

Ingestion : Not expected under normal use.

Section 12. Ecological information

This material is toxic to aquatic life. This material is harmful to aquatic life with long lasting effects.

Toxicity

Product/ingredient name	Result	Species	Exposure
sodium nitrite	Acute EC50 159000 µg/l Marine water	Algae - Tetraselmis chuii	72 hours
	Acute EC50 1600000 µg/l Marine water	Algae - Tetraselmis chuii	96 hours
	Acute EC50 15.4 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC50 1100 µg/l Fresh water	Crustaceans - Cherax quadricarinatus	48 hours
	Acute LC50 0.16 µg/l Fresh water	Fish - Ictalurus punctatus - Fingerling	96 hours
	Chronic NOEC 0.912 mg/l Marine water	Fish - Hippocampus abdominalis - Juvenile (Fledgling, Hatchling, Weanling)	35 days

Persistence and degradability

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
sodium nitrite	-3.7	-	low

Mobility in soil

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

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

Section 13. Disposal considerations

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

	DOT Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-

Section 14. Transport information

Environmental hazards	No.	No.	No.

Additional information

DOT Classification : **Reportable quantity** Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

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.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

U.S. Federal regulations

Toxic Substances Control Act (TSCA)

TSCA 5(a)2 final significant new use rules: sodium nitrite; 4-nonylphenol, branched

TSCA 12(b) one-time export: sodium nitrite

Clean Water Act (CWA) 311

Ingredient name	CAS number
sodium nitrite	7632-00-0

Clean Water Act (CWA) 307

None of the components are listed.

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)

None of the components are listed.

CERCLA: Hazardous substances.

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Reportable quantity : 1,4-dioxane: 100 lbs. (45.4 kg); ethylene oxide: 10 lbs. (4.54 kg); sodium nitrite: 100 lbs. (45.4 kg);

SARA 302/304

None of the components are listed.

SARA 311/312

Classification : See GHS Classification in section 2 for hazard class information

SARA 313

	Product name	CAS number	De minimus exemptions:
Form R - Reporting requirements	sodium nitrite	7632-00-0	1%

State regulations

Massachusetts : The following components are listed: SODIUM NITRITE

Section 15. Regulatory information

- New York** : The following components are listed: Sodium nitrite
- New Jersey** : The following components are listed: SODIUM NITRITE; NITROUS ACID, SODIUM SALT
- Pennsylvania** : The following components are listed: NITROUS ACID, SODIUM SALT
- California**

California Prop. 65

Ingredient name	Concentration	
1,4-Dioxane	Trace	Cancer
Ethylene oxide	Trace	Cancer, Developmental, Reproductive female, Reproductive male

SCAQMD Rule 1144

This product has not been tested for VOC content by the ASTM E-1868-10 (2021) method and is not approved for sale or distribution in the SCAQM District of California if the product is used as a metal forming, metal removal, metal treating, metal protection fluid

International regulations

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

- United States** : All components are active or exempted.
- Canada** : All components are listed or exempted.

Section 16. Other information

Date of issue/Date of revision : 4/7/2022

Version : 1

Key to abbreviations : Quaker Houghton Product Stewardship

: ATE = Acute Toxicity Estimate

: BCF = Bioconcentration Factor

: GHS = Globally Harmonized System of Classification and Labelling of Chemicals

: IATA = International Air Transport Association

: IBC = Intermediate Bulk Container

: IMDG = International Maritime Dangerous Goods

: LogPow = logarithm of the octanol/water partition coefficient

: MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

: N/A = Not available

: SGG = Segregation Group

: UN = United Nations

: VOC = Volatile Organic Compound

Section 16. Other information

References : Safety data sheets of raw materials, global regulatory body information, scientific literature, and testing data .

✔ Indicates information that has changed from previously issued version.

Notice to reader

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