SAFETY DATA SHEET

Creation Date 24-Nov-2010 **Revision Date** 07-Jan-2014 **Revision Number** 7

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Description:	**Bromine**
Cat No. :	**402840000; 402840010; 402841000; 402845000**
Synonyms	Bromine molecule.; Diatomic bromine; Dibromine
CAS-No	7726-95-6
EC-No.	231-778-1
Molecular Formula	Br2
Reach Registration Number	01-2119461714-37

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

Recommended Use	Laboratory chemicals
Sector of use	SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites
Product category	PC21 - Laboratory chemicals
Process categories	PROC15 - Use as a laboratory reagent
Environmental release category	ERC6a - Industrial use resulting in manufacture of another substance (use of intermediates)
Uses advised against	No Information available

1.3. Details of the supplier of the safety data sheet

Company	Acros Organics BVBA Janssen Pharmaceuticalaan 3a 2440 Geel, Belgium
E-mail address	begel.sdsdesk@thermofisher.com

1.4. Emergency telephone number

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11
Emergency Number **US:**001-201-796-7100 / **Europe:** +32 14 57 52 99
CHEMTREC Tel. No.**US:**001-800-424-9300 / **Europe:**001-703-527-3887

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP Classification - Regulation (EC) No 1272/2008

Physical hazards
Based on available data, the classification criteria are not met

Health hazards

Acute Inhalation Toxicity - Vapors	Category 1
Skin Corrosion/irritation	Category 1 A
Serious Eye Damage/Eye Irritation	Category 1

Environmental hazards

Acute aquatic toxicity	Category 1

Classification according to EU Directives 67/548/EEC or 1999/45/EC

SECTION 2: HAZARDS IDENTIFICATION

Symbol(s) T+ - Very toxic
N - Dangerous for the environment
C - Corrosive

R-phrase(s) R26 - Very toxic by inhalation
R35 - Causes severe burns
R50 - Very toxic to aquatic organisms

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

2.2. Label elements

Signal Word **Danger**

Hazard Statements

H314 - Causes severe skin burns and eye damage
H330 - Fatal if inhaled
H400 - Very toxic to aquatic life

Precautionary Statements

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting
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
P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing
P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection
P273 - Avoid release to the environment

2.3. Other hazards

Lachrymator (substance which increases the flow of tears)

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Component	CAS-No	EC-No.	Weight %	CLP Classification - Regulation (EC) No 1272/2008	DSD Classification - 67/548/EEC
Bromine	7726-95-6	EEC No. 231-778-1	>95	Acute Tox. 1 (H330) Skin Corr. 1A (H314) Eye Dam. 1 (H318) Aquatic acute 1 (H400)	T+; R26 C; R35 N; R50

Reach Registration Number	01-2119461714-37

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General Advice	Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
Ingestion	Do not induce vomiting. Call a physician or Poison Control Center immediately.
Inhalation	If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Move to fresh air. Immediate medical attention is required.
Protection of First-aiders	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination

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

Causes burns by all exposure routes. . Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

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

Notes to Physician Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Extinguishing media which must not be used for safety reasons
No information available.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous membranes. Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous Combustion Products
Hydrogen halides, Thermal decomposition can lead to release of irritating gases and vapors.

5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Use personal protective equipment. Ensure adequate ventilation.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

6.3. Methods and material for containment and cleaning up

Keep in suitable, closed containers for disposal. Soak up with inert absorbent material.

6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Wear personal protective equipment. Do not ingest.

7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area.

7.3. Specific end use(s)

Use in laboratories

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits
List source(s):
EU - Commission Directive 2006/15/EC of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.
UK - EH40/2005 Containing the workplace exposure limits (WELs) for use with the Control of Substances Hazardous to Health Regulations (COSHH) 2002 (as amended). Updated by September 2006 official press release and October 2007 Supplement.
IRE - 2010 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001. Published by the Health and Safety Authority.

Component	European Union	The United Kingdom	France	Belgium	Spain
Bromine	TWA: 0.1 ppm 8 hr TWA: 0.7 mg/m^3 8 hr	STEL: 0.2 ppm 15 min STEL: 1.3 mg/m^3 15 min TWA: 0.1 ppm 8 hr TWA: 0.66 mg/m^3 8 hr	TWA / VME: 0.1 ppm (8 heures). restrictive limit TWA / VME: 0.7 mg/m^3 (8 heures). restrictive limit	TWA: 0.1 ppm 8 uren TWA: 0.67 mg/m^3 8 uren STEL: 0.2 ppm 15 minuten STEL: 1.3 mg/m^3 15 minuten	TWA / VLA-ED: 0.1 ppm (8 horas) TWA / VLA-ED: 0.7 mg/m^3 (8 horas)

Component	Italy	Germany	Portugal	The Netherlands	Finland
Bromine	TWA: 0.1 ppm 8 ore. TWA: 0.7 mg/m^3 8 ore.	TWA: 0.7 mg/m^3 (8 Stunden). AGW - exposure factor 1	STEL: 0.2 ppm 15 minutos TWA: 0.1 ppm 8 horas	STEL: 0.2 mg/m^3 15 minuten	STEL: 0.1 ppm 15 minuutteina STEL: 0.66 mg/m^3 15 minuutteina

Component	Austria	Denmark	Switzerland	Poland	Norway
Bromine	STEL: 0.1 ppm 15 Minuten STEL: 0.7 mg/m^3 15 Minuten TWA: 0.1 ppm 8 Stunden TWA: 0.7 mg/m^3 8 Stunden Ceiling: 0.1 ppm Ceiling: 0.7 mg/m^3	TWA: 0.1 ppm 8 timer TWA: 0.7 mg/m^3 8 timer	STEL: 0.1 ppm 15 Minuten STEL: 0.7 mg/m^3 15 Minuten MAK: 0.1 ppm 8 Stunden MAK: 0.7 mg/m^3 8 Stunden	NDSCh: 1.4 mg/m^3 15 minutach TWA: 0.7 mg/m^3 8 godzinach	TWA: 0.1 ppm 8 timer TWA: 0.7 mg/m^3 8 timer STEL: 0.3 ppm 15 minutter. STEL: 2.1 mg/m^3 15 minutter.

Component	Bulgaria	Croatia	Ireland	Cyprus	Czech Republic
Bromine	TWA: 0.7 mg/m^3	TWA: 0.1 ppm 8 satima. TWA: 0.7 mg/m^3 8 satima.	TWA: 0.1 ppm 8 hr. TWA: 0.7 mg/m^3 8 hr.	TWA: 0.1 ppm TWA: 0.7 mg/m^3	TWA: 0.7 mg/m^3 8 hodinách. Ceiling: 1.4 mg/m^3

Component	Estonia	Gibraltar	Greece	Hungary	Iceland
Bromine	TWA: 0.1 ppm 8 tundides. TWA: 0.7 mg/m^3 8 tundides.	TWA: 0.1 ppm 8 hr TWA: 0.7 mg/m^3 8 hr	STEL: 0.3 ppm STEL: 2 mg/m^3 TWA: 0.1 ppm TWA: 0.7 mg/m^3	TWA: 0.7 mg/m^3 8 órában. potential for cutaneous absorption	TWA: 0.1 ppm 8 klukkustundum. TWA: 0.7 mg/m^3 8 klukkustundum. Ceiling: 0.2 ppm Ceiling: 1.4 mg/m^3

Component	Latvia	Lithuania	Luxembourg	Malta	Romania
Bromine	TWA: 0.1 ppm TWA: 0.7 mg/m^3	TWA: 0.1 ppm TWA: 0.7 mg/m^3	TWA: 0.1 ppm 8 Stunden TWA: 0.7 mg/m^3 8 Stunden	TWA: 0.1 ppm TWA: 0.7 mg/m^3	TWA: 0.1 ppm 8 ore TWA: 0.7 mg/m^3 8 ore

Component	Russia	Slovak Republic	Slovenia	Sweden	Turkey
Bromine	Skin notation MAC: 0.5 mg/m^3	TWA: 0.1 ppm TWA: 0.7 mg/m^3	TWA: 0.1 ppm 8 urah TWA: 0.7 mg/m^3 8 urah	STV: 0.3 ppm 15 minuter STV: 2 mg/m^3 15 minuter LLV: 0.1 ppm 8 timmar. LLV: 0.7 mg/m^3 8 timmar.	TWA: 0.1 ppm 8 saat TWA: 0.7 mg/m^3 8 saat

Biological limit values
This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Monitoring methods
BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.
MDHS70 General methods for sampling airborne gases and vapours
MDHS 88 Volatile organic compounds in air. Laboratory method using diffusive samplers, solvent desorption and gas chromatography
MDHS 96 Volatile organic compounds in air - Laboratory method using pumped solid sorbent tubes, solvent desorption and gas chromatography

Derived No Effect Level (DNEL) No information available.

Route of exposure	Acute effects (local)	Acute effects (systemic)	Chronic effects (local)	Chronic effects (systemic)
Oral				
Dermal				
Inhalation	0.7 mg/m^3	0.7 mg/m^3	0.7 mg/m^3	0.7 mg/m^3

Predicted No Effect Concentration (PNEC) No information available.
Fresh water 1 ¿g/L
Marine water 1 ¿g/L

8.2. Exposure controls

Engineering Measures
Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.
Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source.

Personal protective equipment

Eye Protection	Goggles (European standard - EN 166)
Hand Protection	Protective gloves

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Butyl rubber	See manufacturers recommendations	-	EN 374	(minimum requirement)

Inspect gloves before use.
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)
Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.
Remove gloves with care avoiding skin contamination.

Skin and body protection	Long sleeved clothing
Respiratory Protection	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly.
Large scale/emergency use	Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.. **Recommended Filter type:** Particulates filter conforming to EN 143, Acid gases filter, Type E, Yellow.
Small scale/Laboratory use	Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. **Recommended half mask:-** Valve filtering: EN405 or Half mask: EN140 plus filter, EN 141 When RPE is used a face piece Fit Test should be conducted.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.
Environmental exposure controls	Prevent product from entering drains. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Red brown	
Physical State	Liquid.	
Odor	strong	
Odor Threshold	No data available	
pH	No information available.	
Melting Point/Range	-7.2°C / 19°F	
Softening Point	No data available	
Boiling Point/Range	58.7°C / 137.7°F	
Flash Point	No information available.	**Method -** No information available.
Evaporation Rate	No data available	
Flammability (solid,gas)	Not applicable	Liquid
Explosion Limits	No data available.	

Vapor Pressure	230 mbar @ 20 °C	
Vapor Density	5.51 (Air = 1.0)	(Air = 1.0)
Specific Gravity / Density	3.111	
Bulk Density	Not applicable	Liquid
Water Solubility	35 g/L (20°C)	
Solubility in other solvents	No information available.	
Partition Coefficient (n-octanol/water)	**Component**	**log Pow**
	Bromine	1.03
Autoignition Temperature	No data available	
Decomposition temperature	No data available	
Viscosity	0.314 cs at 25 °C	
Explosive Properties	No information available.	
Oxidizing Properties	No information available.	

9.2. Other information

Molecular Formula	Br2
Molecular Weight	159.82

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

None known, based on information available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	None under normal processing.

10.4. Conditions to avoid

Incompatible products, Excess heat.

10.5. Incompatible materials

Organic materials. Strong oxidizing agents. Ammonia. Fluorine. Metals. Reducing agents.

10.6. Hazardous decomposition products

Hydrogen halides, Thermal decomposition can lead to release of irritating gases and vapors.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Product Information

(a) acute toxicity;

Oral	Based on available data, the classification criteria are not met
Dermal	Based on available data, the classification criteria are not met
Inhalation	Category 1

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Bromine	2600 mg/kg (Rat)		

(b) skin corrosion/irritation; Category 1 A

(c) serious eye damage/irritation; Category 1

(d) respiratory or skin sensitization;

Respiratory Based on available data, the classification criteria are not met
Skin Based on available data, the classification criteria are not met

(e) germ cell mutagenicity; Based on available data, the classification criteria are not met

(f) carcinogenicity; Based on available data, the classification criteria are not met

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; Based on available data, the classification criteria are not met

(h) STOT-single exposure; Based on available data, the classification criteria are not met

(i) STOT-repeated exposure; Based on available data, the classification criteria are not met

Target Organs Central nervous system (CNS), Eyes, Respiratory system, Skin.

(j) aspiration hazard; Based on available data, the classification criteria are not met

Other Adverse Effects See actual entry in RTECS for complete information
Symptoms / effects, both acute and delayed Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity
Ecotoxicity effects Very toxic to aquatic organisms. The product contains following substances which are hazardous for the environment.

12.2. Persistence and degradability Not readily biodegradable
Persistence Persistence is unlikely, based on information available.
Degradation in sewage treatment plant Contains substances known to be hazardous to the environment or not degradable in waste water treatment plants.

12.3. Bioaccumulative potential Bioaccumulation is unlikely

Component	log Pow	Bioconcentration factor (BCF)
Bromine	1.03	No data available

12.4. Mobility in soil The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces. Will likely be mobile in the environment due to its volatility. Disperses rapidly in air.

12.5. Results of PBT and vPvB assessment No data available for assessment

12.6. Other adverse effects
Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors
Persistent Organic Pollutant This product does not contain any known or suspected substance
Ozone Depletion Potential This product does not contain any known or suspected substance

SECTION 13: DISPOSAL CONSIDERATIONS

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues / Unused Products Should not be released into the environment. Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

Contaminated Packaging Dispose of this container to hazardous or special waste collection point..

European Waste Catalogue (EWC) According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.

Other Information Do not dispose of waste into sewer. Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains. Large amounts will affect pH and harm aquatic organisms. Do not let this chemical enter the environment.

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO

14.1. UN number 1744
14.2. UN proper shipping name BROMINE
14.3. Transport hazard class(es) 8
Subsidiary Hazard Class 6.1
14.4. Packing group I

ADR

14.1. UN number 1744
14.2. UN proper shipping name BROMINE
14.3. Transport hazard class(es) 8
Subsidiary Hazard Class 6.1
14.4. Packing group I

IATA

14.1. UN number 1744
14.2. UN proper shipping name FORBIDDEN FOR IATA TRANSPORT
14.3. Transport hazard class(es) 8
Subsidiary Hazard Class 6.1
14.4. Packing group I

14.5. Environmental hazards Dangerous for the environment
Product is a marine pollutant according to the criteria set by IMDG/IMO

14.6. Special precautions for user No special precautions required

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable, packaged goods

SECTION 15: REGULATORY INFORMATION

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

International Inventories X = listed

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
Bromine	231-778-1	-		X	X	-	X	-	X	X	X

Component	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements
Bromine	20 tonne	100 tonne

National Regulations

Component	Germany - Water Classification (VwVwS)	Germany - TA-Luft Class
Bromine	WGK 2	

Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment
Take note of Dir 94/33/EC on the protection of young people at work
Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted

SECTION 16: OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3
R35 - Causes severe burns
R26 - Very toxic by inhalation
R50 - Very toxic to aquatic organisms

Full text of H-Statements referred to under sections 2 and 3
H330 - Fatal if inhaled
H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage
H400 - Very toxic to aquatic life

Legend

CAS - Chemical Abstracts Service
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Existing and Evaluated Chemical Substances

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
ENCS - Japan Existing and New Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit
ACGIH - American Conference of Industrial Hygiene
DNEL - Derived No Effect Level
RPE - Respiratory Protective Equipment
LC50 - Lethal Concentration 50%
NOEC - No Observed Effect Concentration
PBT - Persistent, Bioaccumulative, Toxic

TWA - Time Weighted Average
IARC - International Agency for Research on Cancer
PNEC - Predicted No Effect Concentration
LD50 - Lethal Dose 50%
EC50 - Effective Concentration 50%
POW - Partition coefficient Octanol:Water
vPvB - very Persistent, very Bioaccumulative

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road
IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code
OECD - Organisation for Economic Co-operation and Development
BCF - Bioconcentration factor

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association
MARPOL - International Convention for the Prevention of Pollution from Ships
ATE - Acute Toxicity Estimate
VOC - Volatile Organic Compounds

Key literature references and sources for data
Suppliers safety data sheet,
Chemadvisor - LOLI,
Merck index,
RTECS

Training Advice
Chemical incident response training.

Creation Date	24-Nov-2010
Revision Date	07-Jan-2014
Revision Summary	
Reason for revision	(M)SDS sections updated, 2, 3.

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

Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet